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A STUDY OF THE DELIVERY OF ADULT WALK-IN  
PRIMARY CARE AT WOMACK ARMY HOSPITAL,  
FT. BRAGG, NORTH CAROLINA

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A Problem Solving Project  
Submitted to the Faculty of  
Baylor University  
In Partial Fulfillment of the  
Requirements for the Degree  
of  
Master of Health Administration

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By

Captain Robert L. Green, MSC

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## I. INTRODUCTION

Patients at Womack Army Hospital, as at most other federal health care facilities, receive excellent medical care once they gain initial access or entry into the health care delivery system. However, gaining entry into the system can be an extremely frustrating and time-consuming process for certain categories of patients. At Womack Army Hospital, the categories of patients that generally experience difficulty receiving that initial medical care (primary care) are adult dependents of active duty service members and retired service members and their adult dependents who seek nonspecialized medical care on a walk-in basis. These walk-in patients are seen in the Acute Minor Illness Clinic (AMIC). The Womack Army Hospital AMIC was established and operates under the guidelines set forth in the U.S. Army Health Services Command Ambulatory Patient Care Model No. 13 (HSC APC Model No. 13).<sup>1</sup> Before discussing HSC APC Model No. 13, the definitions listed in Appendix A should be reviewed and understood.

### Conditions Which Prompted the Study

HSC APC Model No. 13 provides a substantial set of guidelines for the operation of the AMOSIST program. These guidelines are for a closely supervised program demanding that the AMOSIST strictly adhere to the algorithms. This writer has observed that the AMOSISTS in the Womack Army Hospital AMIC are oftentimes required to deviate from the AMOSIST Manual<sup>2</sup> (algorithms). This has been required in the past year due to the severe physician shortage experienced at Womack. In the

spring and the early summer of 1979, the Medical Clinic had only one general medical officer (GMO) and the AMIC had only one physician to supervise as many as fourteen AMOSISTs. HSC APC Model No. 13 suggests that a physician can supervise five to eight AMOSISTs. This critical physician shortage has resulted in the screeners in the screening section of the AMOSIST program referring patients that should be seen by a physician to an AMOSIST. The screener is caught in a trap. The patient is there in front of him with a problem which is not an emergency but which should be seen by a GMO in the next day or two. The patient knows that, if he is told to call Central Appointments for an appointment in the Medical Clinic, there will not be an appointment available for forty-five to sixty days. Therefore, what does the screener do with the patients who are immediately present and demanding care? The only option for the screener and the patient is either to triage the patient as an emergency or to send the patient to the AMIC to see an AMOSIST. The option of mistriaging the patient as an emergency is seldom used because of obvious reasons (i.e., disrupting a physician already overscheduled with appointments, slowing down treatment of true emergencies, etc.). The option most used is sending the patient to the AMIC to see an AMOSIST, when the Triage Manual used by the screener indicates the patient should be seen by a GMO.

GMO level (IIIA) patients that are seen in the AMIC by AMOSISTs cause the clinic to operate inefficiently. The AMOSIST seeing GMO level patients cannot use the algorithms because the algorithms are designed only for certain medical problems which are triaged out by the screener as AMOSIST level (IV) conditions. This results in the AMOSIST doing

examinations and making medical judgments for which he is not qualified. Therefore, he must consult with the physician on every patient and receive far more guidance from the physician than would be required if the individual were an AMOSIST level patient. It is this writer's contention that this procedure requires much more AMOSIST and physician time than would be needed if the GMO level patient were seen by a GMO. Also, this procedure puts the hospital at a high medico-legal risk.<sup>3</sup> In a situation such as this, the patient is the loser. He has to wait longer to receive care, and the care he finally receives may be inadequate or inappropriate.

It is recognized by this writer that a significant number of the walk-in visits to the AMIC could be eliminated if patients were more knowledgeable about their health and knew the appropriate response to particular circumstances. Currently, patients are not able to make use of health services with maximum efficiency. Some patients view a clinic visit as the appropriate response to symptoms for which no action is required. Therefore, influencing patient behavior must be considered in the efficient delivery of primary care.

#### Problem Statement

The problem is to determine the most efficient method of providing primary care to adult walk-in patients at Womack Army Hospital.

#### Objectives

The objectives are to analyze the AMIC's existing method of operation, to discuss several alternative methods, and to evaluate the advantages and disadvantages of the present and the alternative methods.



### Criteria

The criteria established for this project include:

1. The triage portion of the AMOSIST program must be in compliance with HSC APC Model No. 13.
2. The AMOSISTS must follow the algorithms' logic in diagnosis and treatment of the patient.
3. The AMOSISTS and the physicians must engage in patient education with each patient in conjunction with a patient education booklet.
4. The average total delivery encounter time per patient should be less than two hours.

### Limitations

Limitations imposed upon this project include:

1. Due to the lack of personnel and financial resources, no additional personnel can be hired without an offsetting reduction in another part of the hospital.
2. Due to a critical physician shortage, no more than four physicians may be assigned to the AMIC.
3. The study does not involve any patients enrolled in the Family Practice Program.

### Literature Review

Information pertaining to the subject of this study is relatively sparse in periodicals and books. Also, the specialty nature of this project precluded the use of much of the general information available. Therefore, the predominant portion of the literature review was devoted to studies and publications released by government organizations.

HSC APC Model No. 13<sup>4</sup> is a thirty-five-page document that provides an excellent overview of the AMOSIST program. It also provides a detailed outline of how to establish and operate an AMOSIST program. This document is the single best source of information about the AMOSIST program and was extensively utilized in the course of this study.

A good source of information about the strengths and weaknesses of the AMOSIST programs currently operational in Army hospitals is the AMOSIST Program Field Evaluation<sup>5</sup> (Report No. HCSD-78-002-E) conducted by Major Aaron W. Schopper. The study is a recent (February, 1979) evaluation of the program.

Another good source of information about patient education in the ambulatory care setting is a Department of Health, Education, and Welfare publication (No. HSA 78-550) entitled A Guide to Health Education in Ambulatory Care Settings,<sup>6</sup> dated May, 1978. Section III has an excellent discussion of how a patient education program can have a significant effect upon patient overutilization of an ambulatory care facility.

Finally, a book written by Edward J. Rising and published by Lexington Books, Ambulatory Care Systems Design for Improved Patient Flow,<sup>7</sup> is an excellent source for ascertaining methodologies for determining patient flow through an ambulatory care facility. This book has some examples of flow sheets and flow charts for depicting patient flow, all of which were most helpful to the researcher in the conduct of the project.

### Research Methodology

Research methodology included discussions with personnel currently involved in the Womack Army Hospital AMIC and the AMOSIST program, brief interviews with selected patients utilizing the AMIC and the AMOSIST program, literature review, and application of flow and time analysis. A patient flow and time analysis form (see Appendix B) was utilized to:

1. Determine total length of time a patient spends in the delivery encounter.
2. Determine the patient arrival rate.
3. Account for AMOSIST time used in waiting for chaperones, waiting for physicians, and consulting with physicians.
4. Account for physician time used in waiting for chaperones.

The above information will be compared for different alternatives to operating the AMIC and varying the combination of health care providers.

### Footnotes

<sup>1</sup>U.S., Department of the Army, Health Services Command, Ambulatory Patient Care Model No. 13 (Ft. Sam Houston, Tex.: Health Services Command, August, 1976). Hereinafter referred to as HSC APC Model No. 13.

<sup>2</sup>U.S., Department of the Army, Womack Army Hospital, Medicine and Surgery Division, AMOSIST Branch, AMOSIST Manual, GR 28-300-002-1, 6th ed. (Ft. Bragg, N.C.: AMOSIST Branch, Medicine and Surgery Division, Womack Army Hospital, 1976).

<sup>3</sup>U.S., Department of the Army, Academy of Health Sciences, Health Care Studies Division, AMOSIST Program Field Evaluation, Report No. HCSD-78-002-E, by Aaron W. Schopper (Ft. Sam Houston, Tex.: Academy of Health Sciences, February, 1979), p. 8. Hereinafter referred to as AMOSIST Program Field Evaluation.

<sup>4</sup>HSC APC Model No. 13.

<sup>5</sup>AMOSIST Program Field Evaluation.

<sup>6</sup>U.S., Department of Health, Education, and Welfare, A Guide to Health Education in Ambulatory Care Settings, Pub. No. HSA 78-5501 (Washington, D.C.: Government Printing Office, May, 1978).

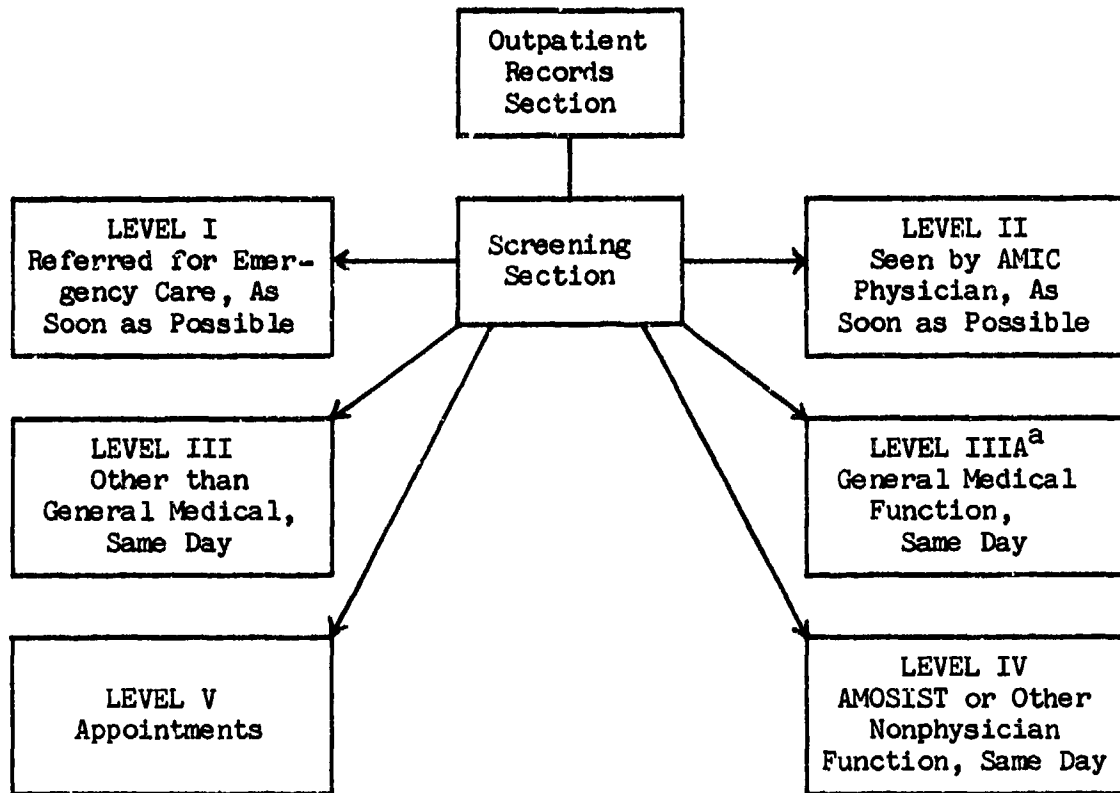
<sup>7</sup>Edward J. Rising, Ambulatory Care Systems Design for Improved Patient Flow (Lexington, Mass.: Lexington Books, D. C. Heath and Co., 1977).

## II. DISCUSSION

An alternative approach methodology is used in this study to determine the most efficient and most effective method for the delivery of primary care to the adult walk-in patients at Womack Army Hospital. This study includes an analysis of the AMIC's existing method of operation as one alternative. The second alternative effects minor changes in the AMIC in that the AMOSIST physicians within the AMIC, except for one, would not be functioning as AMOSIST physicians but rather would be seeing those Level IIIA patients that are currently being seen by AMOSISTS; one AMOSIST physician would continue to supervise and consult with the AMOSISTS and the screeners. Under the third alternative, one AMOSIST physician would supervise the AMOSISTS in the screening section and those working in the AMIC and the other two GMOs would be moved to the General Medical Clinic.

### Alternative I: Retain Existing Method of AMIC Operation

Figure 1 depicts the current patient flow through the Womack Army Hospital AMOSIST program and explains the level of disposition used by the screeners. It can clearly be seen that Level IIIA patients, who are patients that should be sent to the General Medical Clinic, are being seen by AMOSISTS with physician consultation, as was stated earlier in this paper. This practice was established during a period of severe physician shortage, especially of GMOs, to work in the Medical Clinic. However, it should be noted that, while there are now



NOTE: Patients are interviewed by screeners in accordance with the Triage Manual and referred to the clinic and the health care provider who can best handle their problem.

<sup>a</sup>Patients are seen in the AMIC by an AMOSIST instead of in the General Medical Clinic by a physician. Patients are seen by AMOSIST always with physician consultation.

Delineation of levels of treatment was obtained from: U.S., Department of the Army, Health Services Command, Ambulatory Patient Care Model No. 13 (Ft. Sam Houston, Tex.: Health Services Command, August, 1976), p. 5.

Fig. 1--Current Patient Flow in Womack Army Hospital AMOSIST Program

three physicians working in the AMIC, the practice continues but the physician is not seeing patients. The AMOSISTs are seeing the patients and consulting with the physician. This procedure is less than optimal medical practice and also subjects Womack Army Hospital to medico-legal risks.

Schopper, in his 1979 field evaluation of the AMOSIST program, states that the safety of the patient depends, first, upon triage to insure that there is an algorithm for his complaint and, then, upon the algorithm being followed exactly to arrive at diagnosis and treatment. When an AMOSIST treats a patient with no algorithm or if he deviates from the algorithm logic, he is using medical judgment, a process for which he is not trained. The safety of the program depends upon compliance with the Judge Advocate General's opinion on acceptable standards for legal protection. The principal requirements are that the AMOSIST's nonphysician status be made clear to the patient, that the algorithms be followed exactly, and that close monitorship (audit) be maintained to assure adherence to the algorithms.<sup>1</sup>

It was noted by this writer that many of the people involved with the AMOSIST program at Womack Army Hospital are not aware of the fact that they are placing this facility at a medico-legal risk. They are not aware of the Judge Advocate General's ruling and the requirements he has established for the program. They do, however, feel that the way the clinic is currently operating is the most efficient and the best way to see the greatest number of patients with the number of physicians available.

A patient flow and time analysis was conducted to determine the total length of time a patient spends in the delivery encounter, to determine the patient arrival rate, to account for the AMOSIST's time used in waiting for chaperones and waiting for consultations with a physician, and to ascertain the physician time used in waiting for chaperones. This information was collected by the use of a patient flow and time

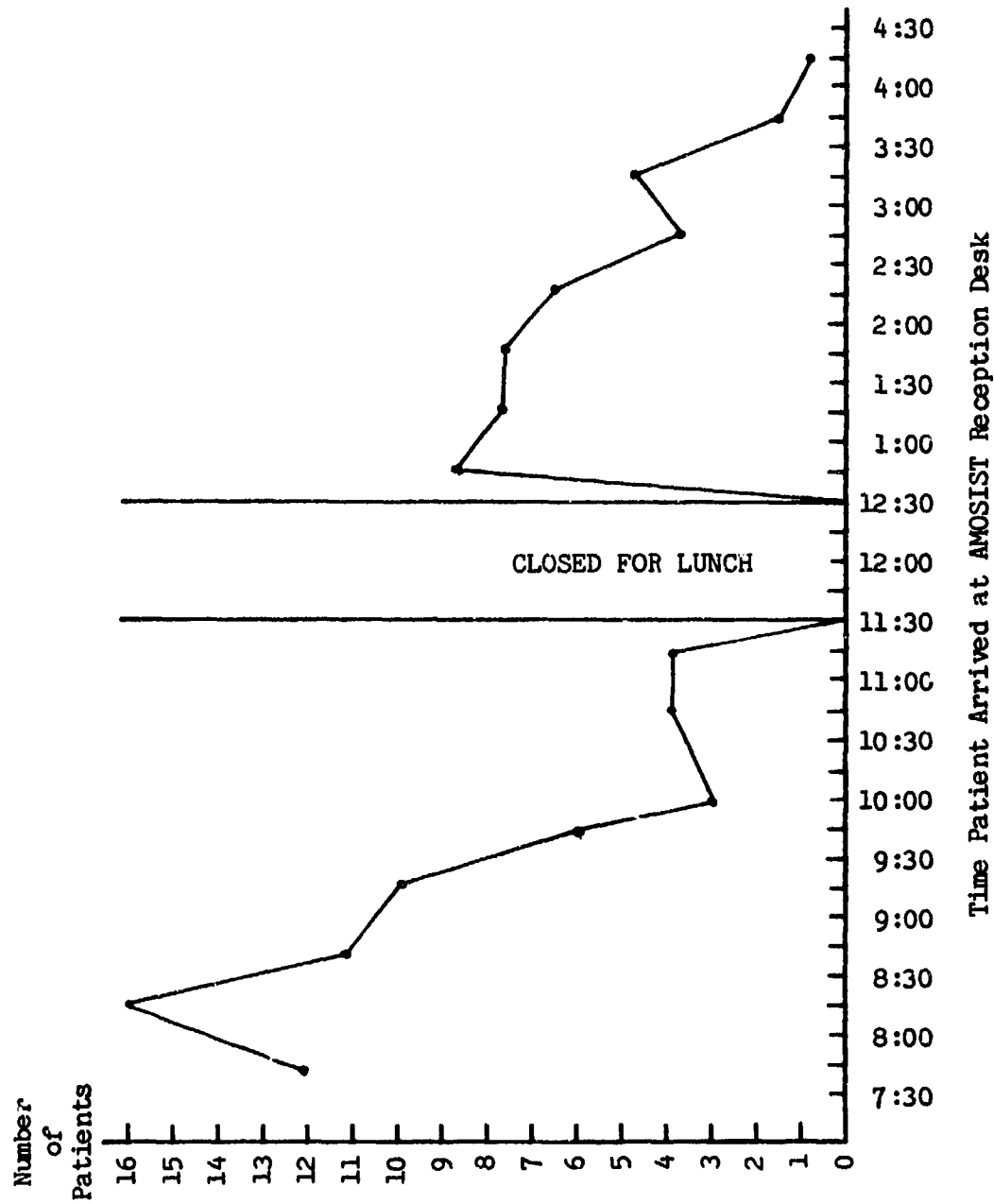
analysis sheet, shown in Appendix B. A sheet was prepared and used for all adult walk-in patients coming to the hospital on the days that the studies were conducted. By using these sheets, it was possible to ascertain exactly when the patient entered a particular phase in the treatment encounter and exactly when he left, exactly how much time was spent waiting in between segments of the treatment, and exactly how long each segment of treatment took.

Appendix C presents the Alternative I AMOSIST program protocol. The protocol establishes the basic ground rules for all of the personnel working within the AMOSIST program, gives them a general description of what their duties are, and indicates the patient flow through the program. Once the protocol had been written and discussed with and understood by all personnel within the AMIC, the first phase of the study was conducted.

The analysis of this alternative was conducted by collecting data on all adult walk-in patients over a seven-day period in November and December, 1979. The average arrival rate of patients presenting themselves to the screening section over these seven days is depicted in Figure 2. Figure 2 clearly illustrates a significant fact: that 44.5 percent of all the patients triaged by the screening section arrive before 9:30 a.m., or during the first two hours of the morning. The arrival rate then significantly drops off to a much smaller number of patients up until the noon lunch break, after which it again rises to a high level and then decreases for the remainder of the day.

Figure 3 illustrates the total time the patient spends in the AMOSIST program during each treatment encounter. The red dashed line





NOTE: Forty-four point five percent of all patients triaged by the screening section arrive before 9:30 a.m.

Fig. 2--Patient Arrival Rate for the AMOSIST Program

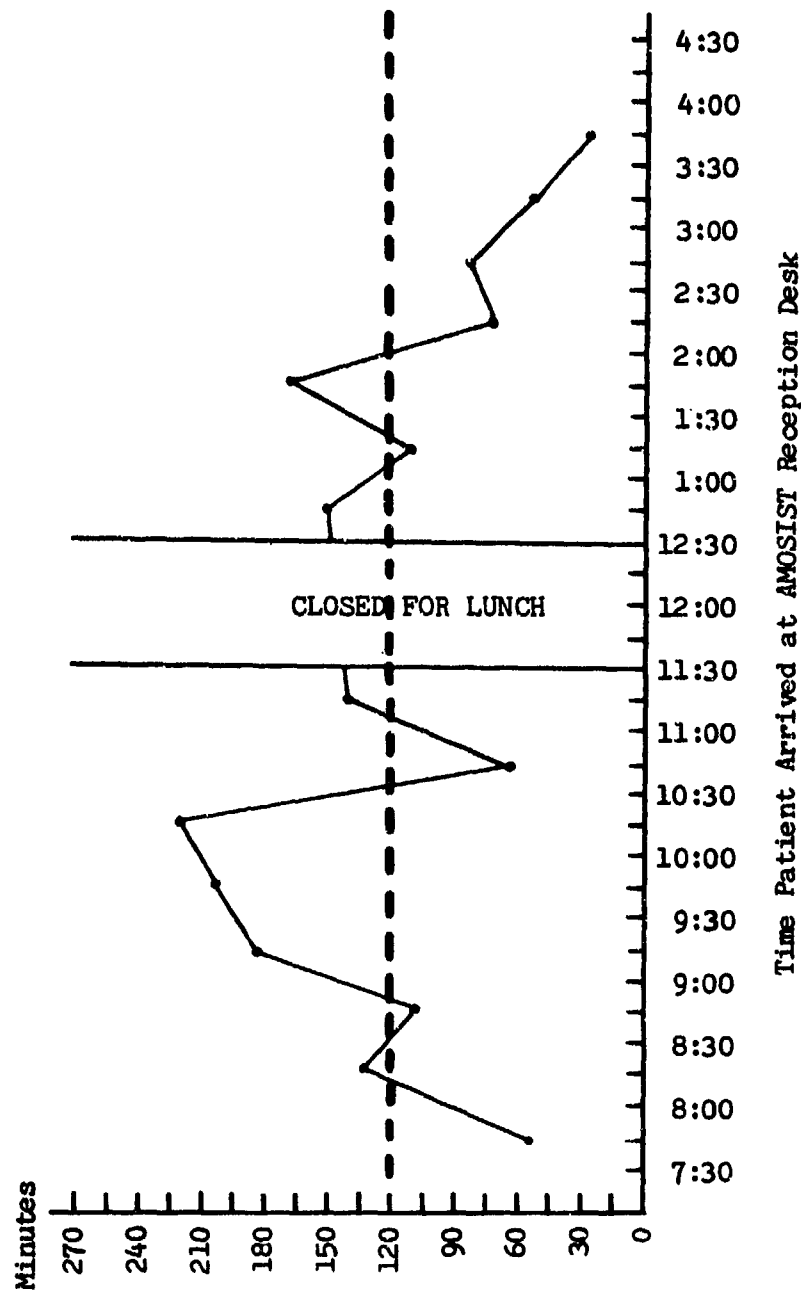


Fig. 3--Average Total Time Patient Spent in AMOSIST Program  
(Less Referrals to Other Clinics) under Alternative I

indicates the 120-minute total time spent in the treatment encounter which has been established as one of the initial criteria for judging the effectiveness of any alternative selected. It can be seen that a large portion of the patients that arrived on the days of the flow and time analysis did spend in excess of the 120-minute limit. In some instances, the time spent in the treatment encounter was almost double that amount. An average of thirty-three patients per day, or 30 percent of the patients presenting themselves to the AMOSIST program, exceeded the 120-minute time limit.

It was noted during the course of the study of this alternative that a large bottleneck is created by the fact that the AMOSISTS must wait unduly long lengths of time to consult with a physician because the AMOSISTS are having to consult an AMOSIST physician on virtually every patient seen with a disposition Level IIIA. The AMOSISTS do not have an algorithm to follow on most of these Level IIIA patients, since they should be referred to a GMO. This study showed that four hours and twenty minutes of total AMOSIST time was spent waiting to consult with an AMOSIST physician. This equates to approximately a one-half AMOSIST man-day loss to the clinic every day.

Additionally, an average of forty-one minutes of total AMOSIST time was spent each day waiting for a chaperone. Chaperone coverage is being provided by the female receptionist that works at the reception desk; therefore, whenever an AMOSIST has a female patient, the receptionist must be called from the front desk back to the treatment area and the reception desk is left unattended. The reception desk being left unattended coupled with the large amount of AMOSIST time being

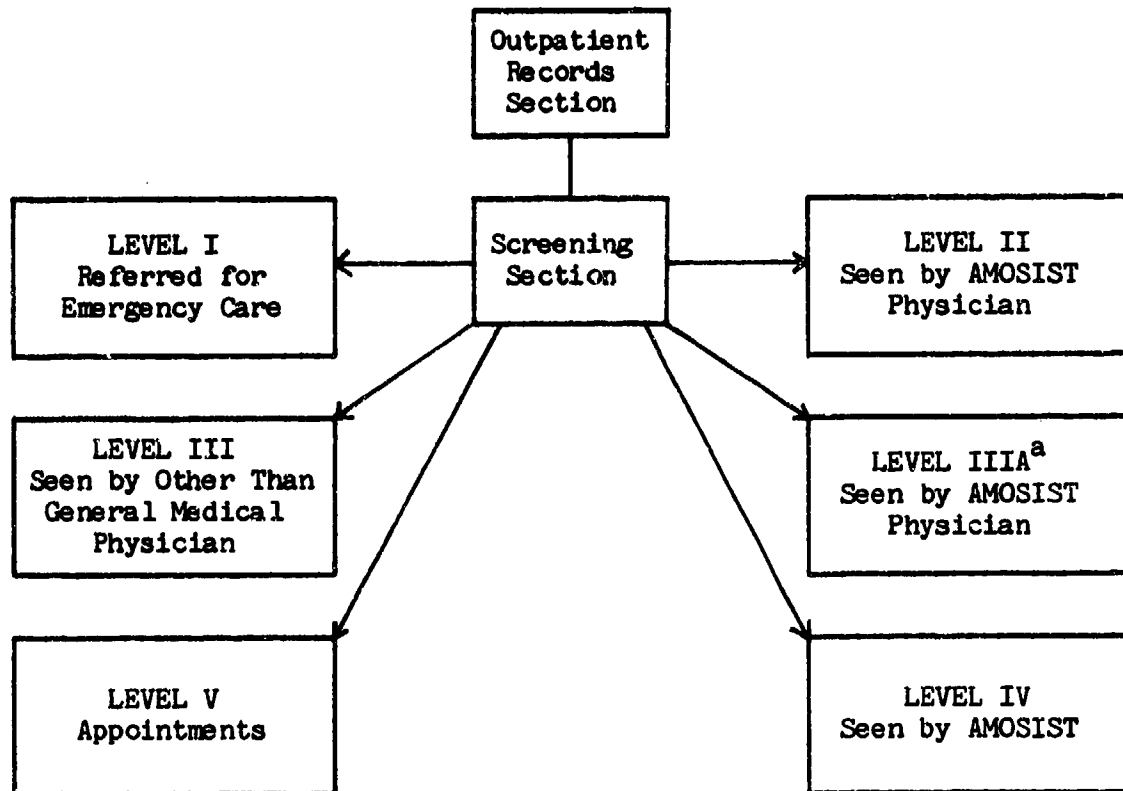
spent in waiting to consult with physicians tend to make the clinic rather chaotic and very full, with a rather large backlog of patients waiting to be seen being generated.

This alternative does not meet the following criteria which were established earlier in this study for judging the effectiveness of any method of operation of the AMOSIST program:

1. The screening section is not triaging in accordance with the Triage Manual. Level IIIA patients are being triaged to AMOSISTs rather than being triaged to the General Medical Clinic.
2. The AMOSISTs are not following the algorithm logic in diagnosis and treatment of patients. The AMOSISTs cannot follow the algorithms if a Level IIIA patient is triaged to them as the algorithms contained in the AMOSIST Manual do not pertain to Level IIIA problems.
3. The AMOSISTs and the AMOSIST physicians are not engaging in patient education due to the fact that the clinic is so chaotic and so backlogged with patients.
4. For approximately 30 percent of the patients, the average total delivery and encounter time per patient exceeds the two-hour time limit.

#### Alternative II: Referral of Level IIIA Patients to a Physician

The second alternative is virtually the same as the first alternative with the exception that all Level IIIA patients would be referred to the AMOSIST physicians and the AMOSIST physician would act in the capacity of the GMO in the General Medical Clinic. The AMOSISTs would see only Level IV patients. Figure 4 depicts the patient flow



<sup>a</sup>Seen in the AMIC instead of in the General Medical Clinic.

Fig. 4--Proposed Patient Flow in Womack Army Hospital  
AMOSIST Program for Alternative II

through the AMOSIST program under Alternative II.

One of the biggest differences between Alternative I and Alternative II is that only one AMOSIST physician would be used to supervise and consult with the AMOSISTs. That physician would not be tied up with seeing patients but rather would consult with the AMOSISTs. This would reduce the amount of time spent by the AMOSISTs waiting to consult with a physician. During the course of the study, it was determined that this would result in a significant reduction in the time spent waiting for physician consultations. In Alternative II, the

average AMOSIST time spent waiting for physician consultation per day would be two hours and ten minutes. Also, with the addition of a Red Cross female volunteer, the time spent waiting for a chaperone would be reduced from forty-one minutes in Alternative I to an average of twenty-six minutes per day in Alternative II.

The patient flow and time analysis studies for Alternative II were conducted over seven days in the month of January, 1980. The patient arrival rate was virtually the same as that shown in Figure 2. However, Figure 5 indicates a considerable difference in the amount of time patients were involved in the treatment encounter in the AMOSIST program. The solid black line on Figure 5 depicts the total patient time spent in the AMOSIST program by patients that were treated by the AMOSIST physician in the back of the AMIC. These were the Level IIIA patients. Further, Figure 5 clearly demonstrates that significant numbers of patients (53 percent) seeing an AMOSIST physician spent greater than 120 minutes in the treatment encounter. The dashed black line on the figure indicates the time the patient seeing an AMOSIST spent in the treatment encounter. It is significant to note that here the times fall below the 120-minute time criterion (dashed red line) which has been established.

One of the significant factors that influenced the difference between the time the AMOSIST patient spent and the time the AMOSIST physician patient spent in the treatment encounter is that the AMOSISTs were in the clinic and started seeing patients at 7:30 a.m. while the AMOSIST physicians often would not start seeing patients until after 8:00 a.m. Thus, the physicians were already behind schedule when they

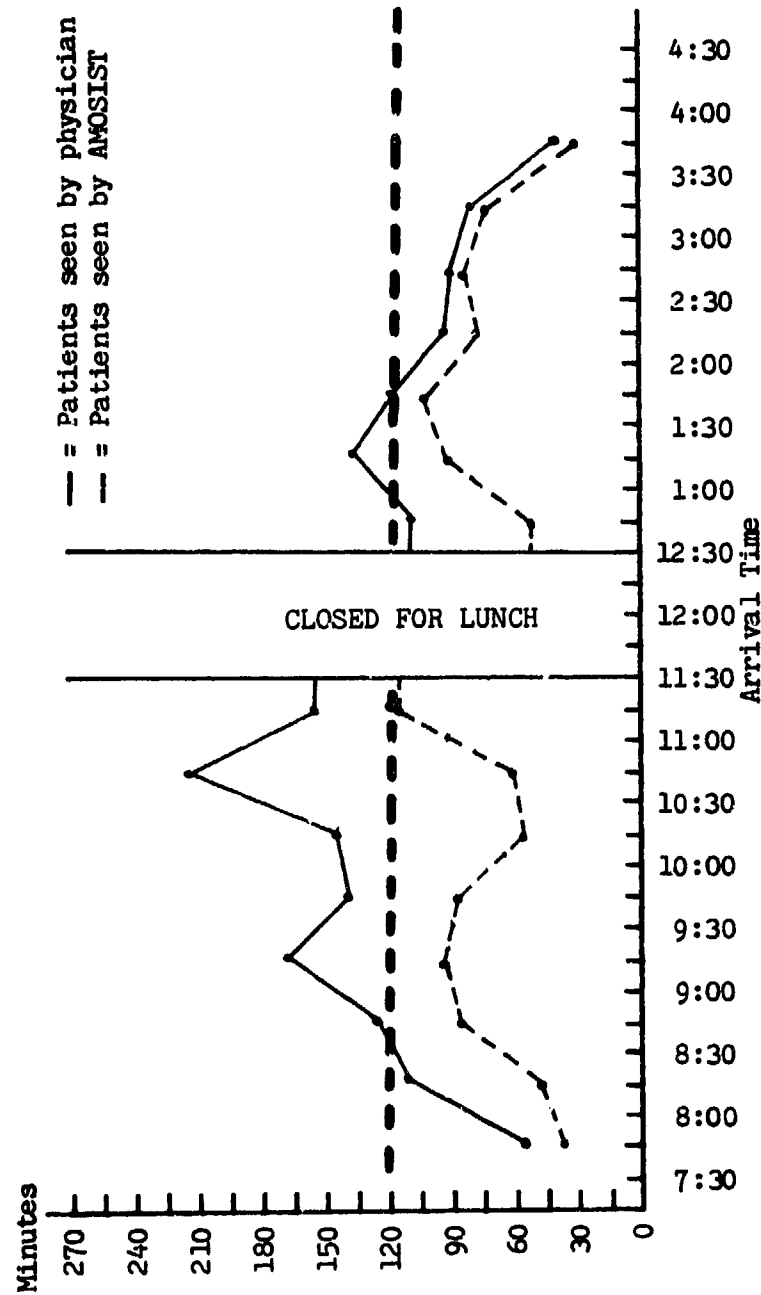


Fig. 5--Average Total Time Patient Spent in AMOSIST Program  
(Less Referrals to Other Clinics) under Alternative II

started because patient triage had begun at 7:30 a.m. By the time the first AMOSIST physician saw his first patients, there was already a backlog of six or seven patients. As noted in Figure 2, 44.5 percent of all expected patients for the day enter the clinic during the first two hours of the morning. Therefore, if the physicians start an hour after the patients have begun arriving, they start out behind and they continue to get further behind as the morning progresses. This factor was brought to the attention of the AMOSIST physicians in the clinic, but they paid little heed to it and came in and started seeing patients when they felt like it. However, the AMOSISTs are more easily controlled, and they are required to start seeing patients at 7:30 a.m. Consequently, the AMOSISTs never let a backlog build up, and the patients did not have to spend as much waiting time in the AMOSIST program.

Another factor that helped the AMOSISTs to keep their patients flowing through the clinic was that they were dealing with conditions for which they had been trained. They were seeing only Level IV patients which had been properly triaged and for which they do have algorithms. Therefore, the AMOSISTs were much more efficient and much more effective in their treatment of their patients. It can also be concluded that, because the AMOSISTs were in compliance with the established algorithms, better and more appropriate patient care was being provided.

The AMOSIST physician coming in and starting treatment of patients around 8:30 a.m. and taking a larger lunch break than the AMOSISTs had a significant impact upon the morale and the functioning of the personnel within the AMIC. There was also trouble with the AMOSIST



physicians wanting to see patients only to stabilize them, to treat an acute minor illness, and to give them enough medication to tide them over until they could be given an appointment to be seen in the Medical Clinic. This caused some hard feelings between the physicians in the AMIC and the physicians in the Medical Clinic. Consequently, the patient was caught in the middle. This resulted in what this writer terms "patchwork medicine," that is, the patient was treated only on a temporary basis, not a definitive basis, until he could be seen by an internal medicine specialist in the Medical Clinic.

In this mode of operation, all disposition levels of patients, with the exception of Level IIIA patients, were moved through the AMOSIST program within the 120-minute time limit. Referring to the table in Appendix D, it can be seen that the Level IIIA patients comprised 23.4 percent of the total patients that entered the AMOSIST program. Therefore, 53 percent of the Level IIIA patients were taking in excess of 120 minutes to be treated in the AMOSIST program. Twelve point four percent, or approximately fourteen patients, each day were having to spend greater than 120 minutes in the treatment encounter. Although fourteen patients out of a total of 110 patients that enter the program does not seem like a significant number, it had a significant impact upon the operation of the AMIC. These fourteen patients that were waiting to see physicians were also in the same waiting area as those patients that were waiting to see an AMOSIST. AMOSIST patients would move through the clinic rather rapidly, but the physician patients would move through the clinic rather slowly. The AMOSIST physician patients would see the other patients moving through the clinic rather

rapidly and would think they were ahead of them in being seen by a health care provider. Therefore, this situation caused a great deal of hard feelings, regardless of the number of signs posted in the waiting area explaining that there were two levels of providers seeing patients and some patients would have to wait longer than others due to the fact that some were waiting to see a physician rather than an AMOSIST. Therefore, this mixing of the AMOSIST and the physician patients together caused a significant number of complaints to be voiced by the patients within the AMOSIST program.

This mode of operation successfully met all the criteria established for the successful operation of an AMOSIST program with the exception of the following two criteria:

1. Although the AMOSIST patients were moving through the treatment encounter in less than 120 minutes, the majority of the AMOSIST physician patients were taking more than 120 minutes. This was, however, a significant improvement over Alternative I.
2. Due to the physician patient backlog, patient education was not being conducted as it should be since the AMOSISTs attempted to mirror the actions of the physicians.

In this writer's opinion, the weakness of this alternative was not the structure or the methodology of the patient flow through the clinic but rather the physicians' passive resistance to the implementation of this alternative. This was due, in large part, to the physicians feeling that all Level IIIA patients should be referred to the Medical Clinic rather than be seen in the AMIC. Another subjective opinion is that, given different personalities for the chief of the AMOSIST program

and the AMOSIST physician working in the program, this alternative probably would work much more successfully.

Alternative III: Referral of Level IIIA  
Patients to Medical Clinic

As a result of lessons learned and things observed during the study of the first two alternative methods of operation of the AMOSIST program and considering the findings of and the recommendations made by Schopper in his field evaluation of the Army AMOSIST program, a third alternative was developed. This alternative was based upon the concepts outlined in HSC APC Model No. 13. This method of operation would move the AMOSIST physicians who, in Alternative II, were seeing Level IIIA patients in the AMIC to the Medical Clinic. Therefore, all Level IIIA patients would be sent to the Medical Clinic rather than to the AMOSIST physician in the AMIC.

Disposition of patients from the screening section of the AMOSIST program would be in strict accordance with the Triage Manual.<sup>2</sup> Based upon the observations in the study for Alternative II, it was felt that one physician could adequately supervise the AMOSISTs in the screening section and the AMIC if the AMOSISTs saw only Level IV patients. This would be an impossibility if AMOSISTs were seeing all Level IIIA patients. Therefore, all physician assets except the chiefs of the AMOSIST program would be sent to the Medical Clinic to handle the walk-in patients referred by the AMOSIST program. It was also felt that this would alleviate the bickering between the physicians in the AMIC and those in the Medical Clinic. With only one physician in the AMOSIST program, when a patient was referred to the Medical Clinic, the physicians in the

Medical Clinic could not say: "Well, they have doctors up in the AMIC; they could have seen this patient up there." With one physician in the AMOSIST program, the physician could only consult with and supervise the AMOSISTs and would not be able to physically see patients. Any patients that would require treatment from a physician would have to be referred to the appropriate specialty clinic indicated by the Triage Manual.

An AMOSIST program protocol was written for this study of the alternative method of operation of the AMOSIST program. The protocol shown in Appendix E is much more detailed than the prior protocol. It was felt that personnel need to have more specific details as to how the program should operate. The hours of operation of the clinic are spelled out in greater detail. It should be noted that, in Alternative III, the screening section would open at 7:15 a.m., which is fifteen minutes before the AMIC actually opens. This was done to try to alleviate some of the initial backlog due to the early arrival rate peak, illustrated in Figure 2. If the triagers start to see patients at 7:15 a.m. and the vital signs are taken prior to 7:30 a.m., when the AMOSISTs in the AMIC are ready to see patients at 7:30 a.m., they will have patients sitting in the waiting area ready to be treated.

Another important area to be addressed in the protocol is recording the time when the patient initially reports to the reception desk, the time when the patient is seen in the triage area, and the time when the patient is seen by the AMOSIST in the AMIC. This procedure is spelled out in Appendix E. The significance of this is that it would give the clinic chief and the NCOIC of the clinic a quick

reference as to how the patients are flowing through the clinic and indicate those AMOSISTs who are seeing patients on a timely basis and those who are not producing and seeing patients. The NCOIC or the chief can look at the log book that is maintained in the vital signs room and determine rather quickly the location of backlogs and the AMOSISTs who are producing and those who are not producing. Even more significant, the AMOSISTs, as they are logging patients in, can look and see what the other AMOSISTs are doing, thus creating some peer pressure to produce.

In order to gain a better line of control over personnel working in the AMOSIST program, some of the authority would be delegated to senior AMOSISTs within the program. Appendix E shows the proposed organizational structure of the AMOSIST program under Alternative III. It should be noted that the senior AMOSIST or the noncommissioned officer in charge (NCOIC) of the AMIC would have supervisory responsibility over the AMOSISTs that work in the AMIC. The NCOIC of the AMOSIST program would be responsible for supervising the receptionist and the chaperones since the receptionist is a civilian employee and the chaperones are female Red Cross volunteers. Also, the NCOIC would supervise the screening section. This would allow the NCOIC to look at the backlog in the different portions of the clinic. If there were a backlog in the AMIC yet there was a very slight backlog or no backlog in the screening section, then one of the AMOSISTs in triage could be moved back to start seeing patients in the AMIC and thus reduce the backlog there. There is also an NCOIC for the support section who would be responsible for the operation of the vital signs room and the supervision of the

corpsman. He would order all the supplies and so forth for the AMOSIST program. This delegation of authority would give the NCOIC of the AMOSIST program more time to move through the clinic and better orchestrate the personnel and the patients as they flow through the clinic and try to take corrective action on any bottlenecks that might occur in the program. It would also allow the AMOSIST program NCOIC enough time to talk with other NCOICs and chief nurses in the specialty clinics to see what type of problems are arising from the patients that are being triaged to the different specialty clinics. This would greatly improve the communications between the AMOSIST program and the specialty clinics and facilitate a better understanding of one another's needs and problems.

The analysis of this alternative took place over a seven-day period in the month of March, 1980. The analysis of the arrival rate of this alternative, shown in Figure 6, indicates that the arrival rate trend is basically the same as for the first two alternatives. However, there were more patients that did come into the program during the period of study of this alternative than during that of the two other alternatives. In Alternative III, the average daily total patient load for the AMOSIST program was 122; under alternatives I and II, that number was 110. This increase can be attributed to two factors. One, there seemed to be an increased number of patients having trouble with allergies due to heavy pollen content in the air in North Carolina, with the pollen count being rather heavy in mid- or late March. The second reason was the phenomenon of increased utilization of the health care facility when the waiting time for health care is reduced. The

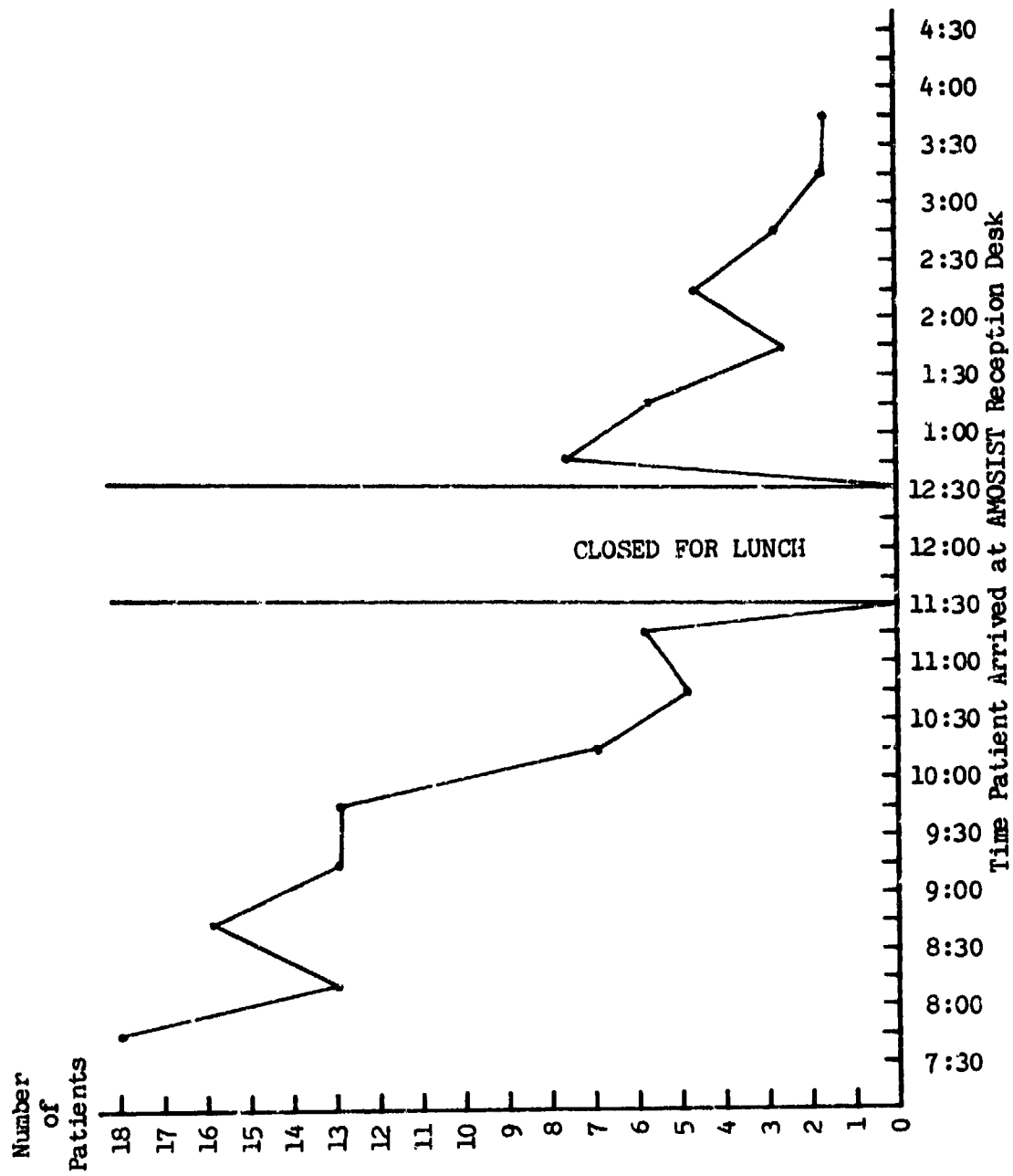


Fig. 6—Patient Arrival Rate for AMOSIST Program under Alternative III

people with minor illnesses are basically the people who prefer to come to the AMIC with a little sniffle or a minor ache or pain when they feel that the trip will not take very long or cause them much trouble.

Figure 7 illustrates the average total time patients spent in the AMOSIST program less the referrals to other clinics. Referrals to other clinics are not included in this figure because those patients only entered the program and were initially screened and referred to the other clinics. They spent an extremely small amount of time in the AMOSIST program and were scattered to the various clinics, and those waiting times were relatively short and insignificant. If those figures were included with the figures of the patients that stayed in the AMOSIST program to obtain definitive medical care, those figures would tend to expand the average waiting time in the AMOSIST program and give a false indication of the actual time that patients had to spend in the AMOSIST program to get definitive care.

It can be seen in Figure 7 that the time spent in the treatment encounter in the AMOSIST program was well below the 120-minute criterion which has been established. As a matter of fact, of all patients entering the AMOSIST program during this seven-day study period of Alternative III, only 2.7 percent of the patients exceeded the 120-minute criterion. These were patients that had to have multiple laboratory tests or X-rays or EKGs. For one reason or another, those tests were delayed. Therefore, this writer thinks that it is significant that virtually all patients who entered the AMOSIST program received definitive treatment in the AMOSIST program not only at the appropriate level of provider but also well within the 120-minute



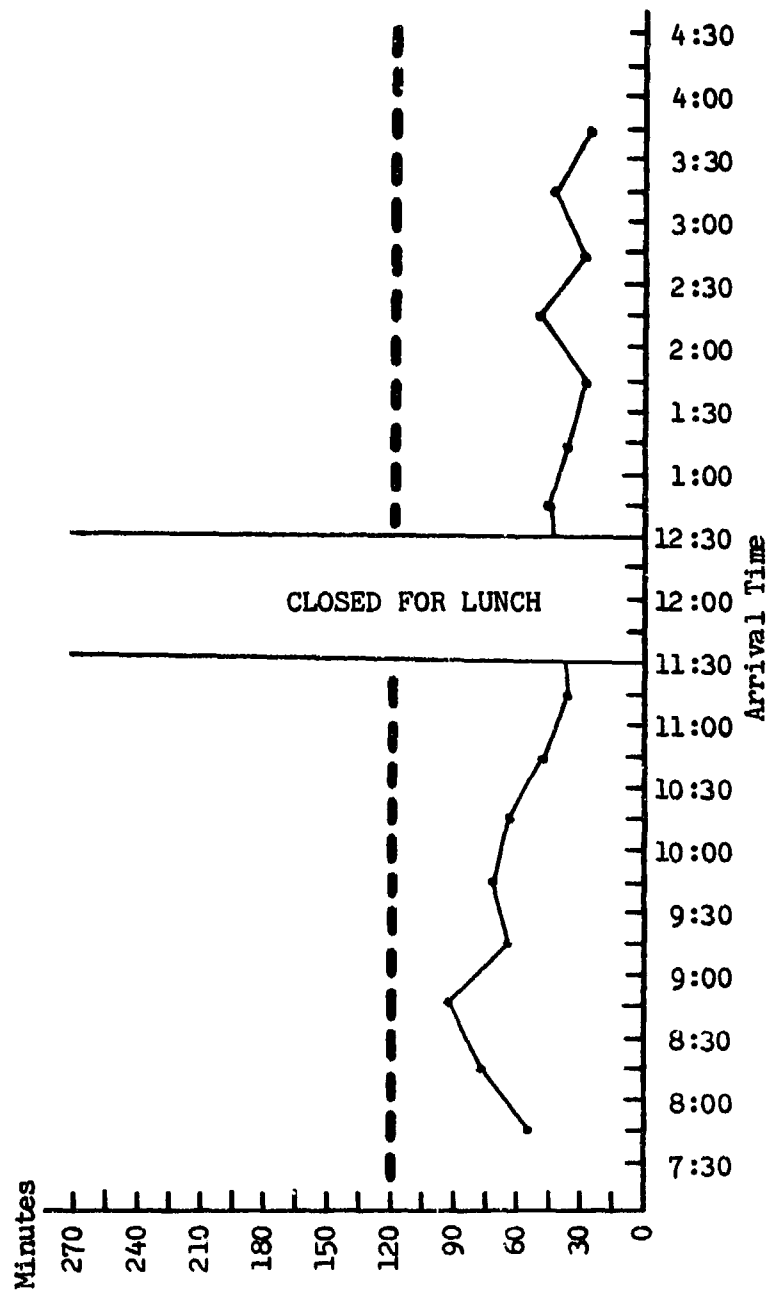


Fig. 7--Average Total Time Patient Spent in AMOSIST Program  
(Less Referrals to Other Clinics) under Alternative III

criterion which has been established.

The key factor in keeping the total encounter time within 120 minutes was the earlier starting time (7:15 a.m.) of triage. By the time the AMOSISTS were ready to start seeing patients at 7:30 a.m., there were patients that had already been triaged and had their vital signs taken, and their charts were waiting to be picked up by the AMOSISTS. The AMOSISTS have been shown and are now convinced that, if they aggressively see patients in the morning and keep the backlog from building up, the rest of the day will not be nearly as chaotic and they will not be constantly behind.

Another factor was that the NCOIC of the AMOSIST program reviewed the log book and the charts in the vital signs room, and, when it was noted that the triage area no longer had the backlog, he moved one of the people triaging back to the AMIC to start seeing patients. This helped alleviate the backlog in the AMIC. Even though the single triager could not triage as many patients as the AMOSISTS could see, the patients being triaged coupled with the patients that were backlogged were more than enough to keep the AMOSISTS busy. Also, as the arrival rate has shown, after 9:30 a.m., the arrival rate falls enough so that one triager can triage all patients coming into the clinic for the rest of the morning. Then, right after lunch, when the arrival rate peaks again, two triagers initially worked in the screening section triaging patients and building up a slight backlog in the AMIC. If the backlog in the AMIC became significant, then one of the triagers again was moved back into the AMIC and started seeing patients.

It should be noted that, at Womack Army Hospital, the triagers

are trained AMOSISTs, although the APC model states that any lay person with approximately eight hours' training with the triage manual can do the triaging. The use of AMOSISTs as screeners permits the clinic more flexibility and allows the AMOSIST screener to be moved back to the AMIC whenever the backlog dictates. There is also considerable peer pressure among the AMOSISTs. As they treat through the day, if they feel that they are seeing more patients than other AMOSISTs, they will say something to one another, indicating the perceived inequality of the workload and requesting a fairer division of patients.

The time the AMOSISTs spent waiting to consult with the AMOSIST physician was three hours and ten minutes. This time was a little greater than in Alternative II, primarily due to the fact that a single physician was responsible for the entire operation of the AMOSIST program and the supervision of the screeners and the AMOSISTs in the AMIC. In the mornings, when the arrival rate and the patient load are the heaviest, there was a tendency for the physician to get somewhat backlogged with AMOSIST and triage consultations. However, the backlog did not seem to be excessive, considering the fact that the other physicians were freed to work in the Medical Clinic to see patients that were properly triaged to that clinic. The AMOSISTs had to wait a minimum of time for chaperones during this alternative because there was a female Red Cross volunteer available to chaperone.

The combination of small backlogs, rapid flow of patients through the clinics, and ready availability of physician (There were no late arrivers, no excessive lunch breaks, and no early leavers.) contributed to improving the morale of the AMOSISTs, and the AMIC

operation ran very smoothly. There was a great deal of high morale and enthusiasm among the people working within the AMOSIST program. This enthusiasm on the part of the AMOSISTs plus the reduced backlog made it possible to improve the patient education aspects of the AMOSIST program. A patient education booklet was prepared by the Family Practice Department at Womack Army Hospital and was utilized as a primary tool in patient education (see Appendix F). If the patient's illness was covered in this patient education booklet, the AMOSIST would pull out the booklet, show it to the patient, read through the booklet with him, and tell the patient that, for this particular problem, if he followed these instructions, he should be able to take care of the problem without seeking medical advice. (The last part of the instructions covers those instances when the patient should seek medical advice.) The patient education booklet was then given to the patient as his personal copy to take home with him.

In examining this alternative, it is clear that all the criteria established for an acceptable method of operation were met. The patients were seen within the 120-minute time limit, patient education took place, the screening section adhered strictly to the Triage Manual, and the AMOSISTs closely followed the algorithm logic in diagnosis and treatment of the patients. In short, under this alternative, the adult walk-in patient received the proper treatment from the appropriate level of provider.

#### Footnotes

<sup>1</sup>AMOSIST Program Field Evaluation, p. 8.

<sup>2</sup>U.S., Department of the Army, Womack Army Hospital, Medicine and Surgery Division, AMOSIST Branch, Triage Manual, GR 28-200-004-1, 6th ed. (Ft. Bragg, N.C.: AMOSIST Branch, Medicine and Surgery Division, Womack Army Hospital, 1976).

### III. CONCLUSION

This study was conducted in an attempt to determine the most effective and most efficient method to provide primary care to adult walk-in patients at Womack Army Hospital. This study covered twenty-one randomly selected days in the months of November and December of 1979 and January and March of 1980. A total of 2,394 patients were studied throughout their treatment encounter within the AMOSIST program. The AMOSIST program is a vehicle used by Womack Army Hospital to provide primary care to the adult walk-in patients at Ft. Bragg, North Carolina.

The three alternatives which were studied have been analyzed, discussed, and evaluated against the criteria established for successful operation of the AMOSIST program. Alternative III clearly meets all the criteria that have been established as well as providing a climate of interest and enthusiasm for the health care providers that are working within that program. Most important, under Alternative III, the patients would be treated within the AMOSIST program by the proper level of provider utilizing his skills and abilities to the fullest yet the AMOSIST would not be making medical judgment for which he is not qualified. Those patients with a medical problem that required treatment by a physician would be triaged by the screening section to the appropriate level of provider--surgical clinic, medical clinic, OB-GYN, or dermatology.

As a result, under Alternative III, the practice of patchwork

medicine would no longer be present in the AMOSIST program. The Medical Clinic would be better able to carry its patient load and handle the walk-in patients with the transfer of the AMOSIST physicians, except the chief of the AMOSIST program, to the Medical Clinic. Communications between the AMOSIST program and the other specialty clinics to which the screening section triages patients would be greatly improved under this alternative method of operation. The NCOIC of the AMOSIST program on a weekly basis would be able to talk to the NCOICs of the specialty clinics and see what problems are being created by patients that have been referred from the AMOSIST program to the respective clinics. This method would result in the patients no longer being caught in the middle between the AMOSIST program and one of the specialty clinics in a question of who has responsibility for the treatment of that patient. The method of operation proposed by Alternative III would better insure that the adult walk-in patient seeking primary care can go to one single place--the screening section of the AMOSIST program--and be directed correctly to receive the proper care by the appropriate level of provider in a reasonable period of time.

It is recommended that Alternative III be implemented at Womack Army Hospital and that the protocol shown in Appendix E be utilized to develop a program standard operating procedure for the operation of the program. To implement this would require no budgetary increase, no new people, and no alteration to the physical facility. One slight modification to Alternative III might be considered in that a second physician could be made available in the AMIC the first two or three hours

of the day. This would alleviate a great deal of the time spent by the AMOSISTS waiting to consult with the physician during the peak arrival period in the morning. A second physician would not really be needed in the afternoon. That would be a waste of physician assets.

This study has shown that gaining initial entry into the health care delivery system does not have to be frustrating and time consuming. If Womack Army Hospital adopts the method of operation outlined in Alternative III, not only will patients that are "in the system" receive excellent medical care but also those people seeking initial primary care will receive excellent care in a minimum amount of time.



APPENDIX A

DEFINITIONS

## DEFINITIONS

The following definitions are applicable to this study:

AMOSIST program--an algorithm-based health care delivery system employing physician-supervised enlisted corpsmen, AMOSISTs, as direct care providers.

AMOSIST--a medical corpsman trained to perform specified medical tasks under the supervision of an AMOSIST physician.

AMOSIST physician--a physician (AMOS oriented) exercising direct supervision over AMOSISTs.

Algorithm--medical logic flow sheets developed by physicians which outline the care for selected medical entities.

Triage--as used in conjunction with this paper refers to the screening portion of the AMOSIST program.

APPENDIX B

SAMPLE PATIENT FLOW AND TIME

ANALYSIS SHEET

## PATIENT FLOW AND TIME ANALYSIS SHEET

SEQUENCE NO. \_\_\_\_\_

1. What is your medical problem today? \_\_\_\_\_

2. Who referred you to this clinic? \_\_\_\_\_

TIME IN  
HR:MINUTESTIME OUT  
HR:MINUTES

____:____	RECEPTIONIST	____:____
____:____	TRIAGE (LEVEL) _____	____:____
____:____	LABORATORY	____:____
____:____	X-RAY	____:____
____:____	EKG	____:____
____:____	TRIAGE-RETURN	____:____
____:____	VITAL SIGNS	____:____
____:____	AMOSIST (Wait for chaperone ____ Min.)	____:____
____:____	AMOSIST (Wait for MD ____ Min.)	____:____
____:____	MDC	____:____
____:____	AMOSIST-RETURN	____:____
____:____	PHYSICIAN	____:____
____:____	LABORATORY	____:____
____:____	X-RAY	____:____
____:____	PHYSICIAN-RETURN	____:____
____:____	NURSE PRAC/PA	____:____
____:____	OTHER _____	____:____
____:____	REFER PATIENT TO MEDICAL CLINIC	____:____

APPENDIX C

PROTOCOL FOR AMOSIST PROGRAM,  
ALTERNATIVE I

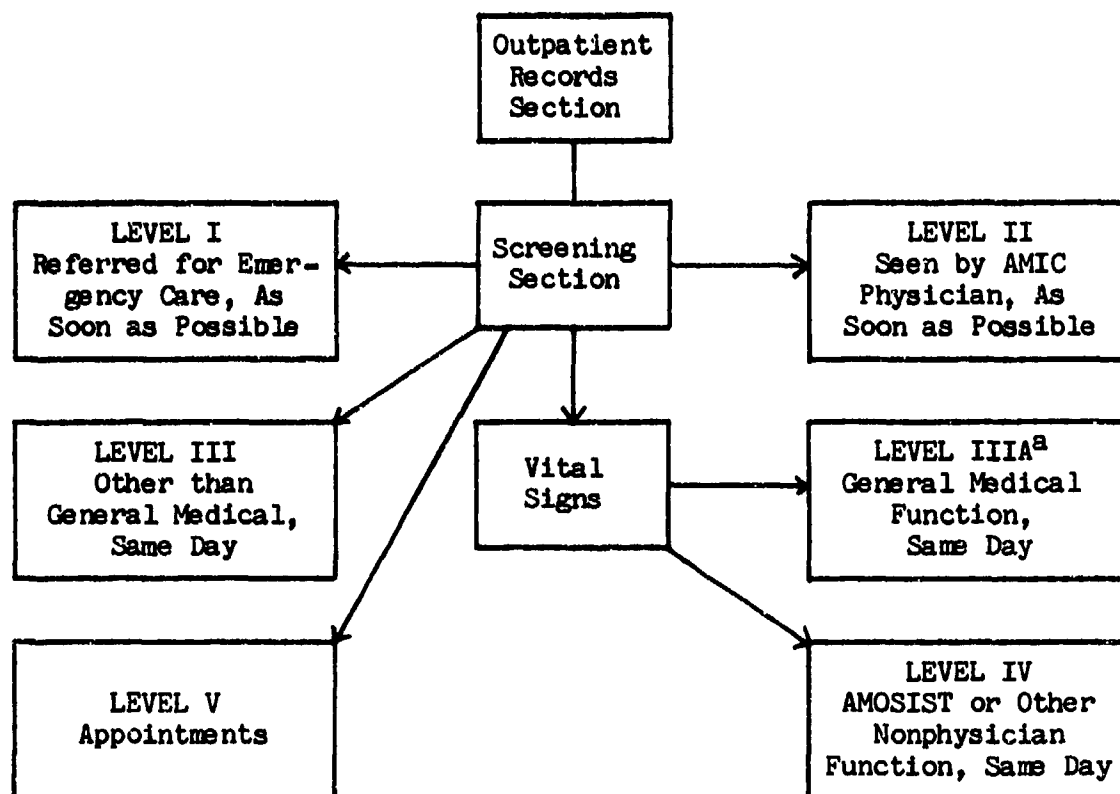
PROTOCOL FOR AMOSIST PROGRAM,  
ALTERNATIVE I

A. CLINIC HOURS OF OPERATION

1. Triage starts at 7:30 a.m. (Start taking vital signs at 7:30 a.m.).
2. AMIC starts seeing patients at 7:30 a.m.
3. Clinic closes for lunch at 11:30 a.m. to 12:30 p.m.
4. Triage closes at 4:00 p.m.; AMIC closes at 4:30 p.m.

B. PATIENT FLOW THROUGH THE AMOSIST PROGRAM (See current patient flow chart below)

1. All adult unappointed outpatients except emergency cases are brought directly to the emergency room; their medical records are picked up at outpatient records section.
2. The patients are instructed by outpatient records section to proceed to the AMIC.
3. The AMIC receptionist gives each incoming patient a queuing number and asks him to be seated.
4. The screener calling the next queuing number stamps the patient's Standard Form (SF) 600 with the triage stamp and enters the triage time. The patients are interviewed by the screener in accordance with the Triage Manual and directed to the clinic and the health care provider which can best treat their problem. The exception to this is Level IIIA--those patients triaged to go to the General Medical Clinic who are seen by AMOSISTS within the AMIC.



NOTE: Patients are interviewed by screeners in accordance with the Triage Manual and referred to the clinic and the health care provider who can best handle their problem.

<sup>a</sup>Patients are seen in the AMIC by an AMOSIST instead of in the General Medical Clinic by a physician. Patients are seen by AMOSIST always with physician consultation.

Delineation of levels of treatment was obtained from: U.S., Department of the Army, Health Services Command, Ambulatory Patient Care Model No. 13 (Ft. Sam Houston, Tex.: Health Services Command, August, 1976), p. 5.

Current Patient Flow in Womack Army  
Hospital AMOSIST Program

5. The patients sent to laboratory or X-ray are told to return directly to the screener with the laboratory or the X-ray results.
6. The patients referred to the emergency room or the specialty clinics leave the AMOSIST program.
7. The patients referred to an AMOSIST or an AMOSIST physician report to the vital signs room where vital signs are taken and recorded on SF 600.
8. The patients triaged to the AMIC are interviewed, examined, and treated by AMOSISTs according to the algorithm flow sheets in the AMOSIST Manual. The problems of those Level IIIA patients referred to AMOSISTs are not contained on a flow sheet in the AMOSIST Manual. For Level IIIA patients, AMOSISTs perform a brief medical examination, take a medical history, and consult with an AMOSIST physician for a treatment regimen. The AMOSIST physician may elect to see the patient if he does not feel that the information provided by the AMOSIST is adequate to make a proper medical judgment. If the patient is sent to laboratory or X-ray by an AMOSIST or an AMOSIST physician, he is told to report directly back to that AMOSIST or that AMOSIST physician with his X-ray or lab reports.
9. After treatment of a patient, the health record is given to the patient to take to pharmacy if a medication order has been written on the data selection sheet. If the medication ordered is not on the AMOSIST drug list, a physician will write the prescription on a standard prescription form. The prescription

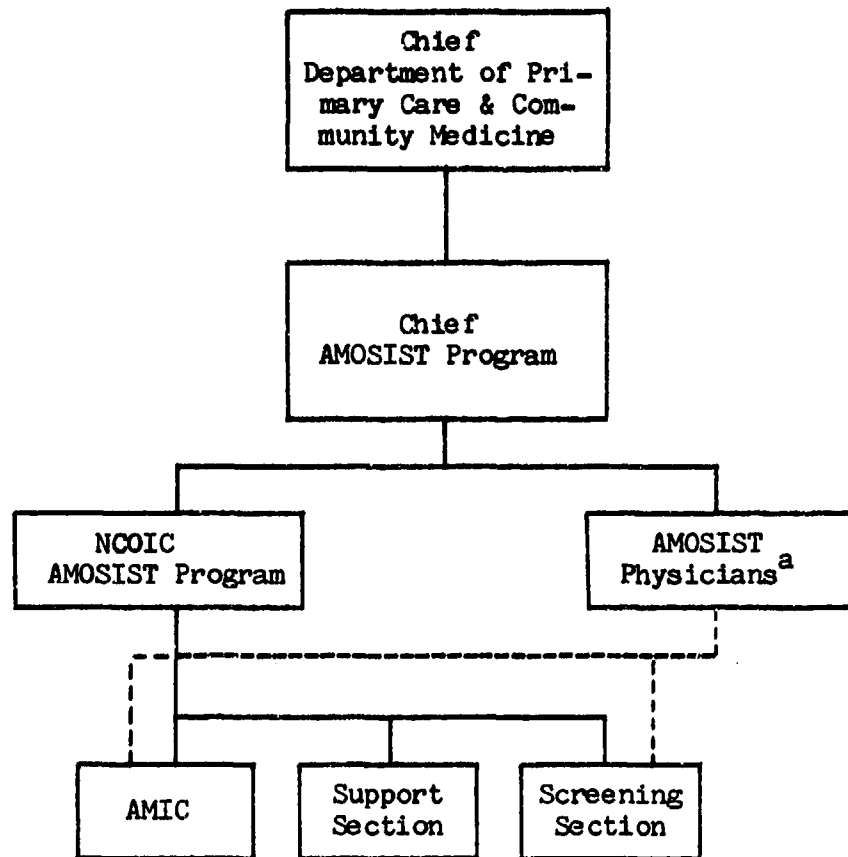


is given to the patient, and the AMOSIST retains the health record.

C. ORGANIZATIONAL ELEMENTS OF THE AMOSIST PROGRAM

The program is organized into three subelements: (1) screening section, (2) Acute Minor Illness Clinic, and (3) support section.

A proposed organizational chart is depicted below. The AMOSIST program falls under the overall supervision of the chief, Department of Primary Care and Community Medicine, with the chief of the AMOSIST program reporting and responsible directly to the chief, Department of Primary Care and Community Medicine. The NCOIC of the AMOSIST program is responsible to the chief of the AMOSIST program for the day-to-day operation of the AMIC, the support section, and the screening section. The AMOSIST physicians provide technical supervision and consulting service for both the screening section and the AMIC.



<sup>a</sup>These physicians provide technical supervision and consultative service for both the screening section and the AMIC.

Proposed Organizational Chart for  
AMOSIST Program, Alternative I

APPENDIX D

BREAKDOWN BY LEVEL OF DISPOSITION OF PATIENTS  
TREATED IN THE AMOSIST PROGRAM  
BY PERCENTAGE

BREAKDOWN BY LEVEL OF DISPOSITION OF PATIENTS TREATED IN  
THE AMOSIST PROGRAM BY PERCENTAGE

Level of Disposition	Alternative I	Alternative II	Alternative III
I	1.0	1.0	1.0
II	3.5	5.1	4.9
IIIA	26.2 <sup>a</sup>	23.4 <sup>b</sup>	20.3
III	14.9	16.3	11.6
IV	45.5	44.8	62.2
V	0.0	0.0	0.0
Prescription Refills	8.9	9.4	0.0 <sup>c</sup>

<sup>a</sup>Seen by AMOSIST with physician consultation.

<sup>b</sup>Seen by AMOSIST physician in AMIC rather than by GMO in Medical Clinic.

<sup>c</sup>Prescription refill responsibility moved to Medical Clinic.

NOTE: Levels of disposition signify:

I--Referred for emergency care, as soon as possible.

II--Seen by AMIC physician, as soon as possible.

IIIA--General medical function, same day.

III--Other than general medical function, same day.

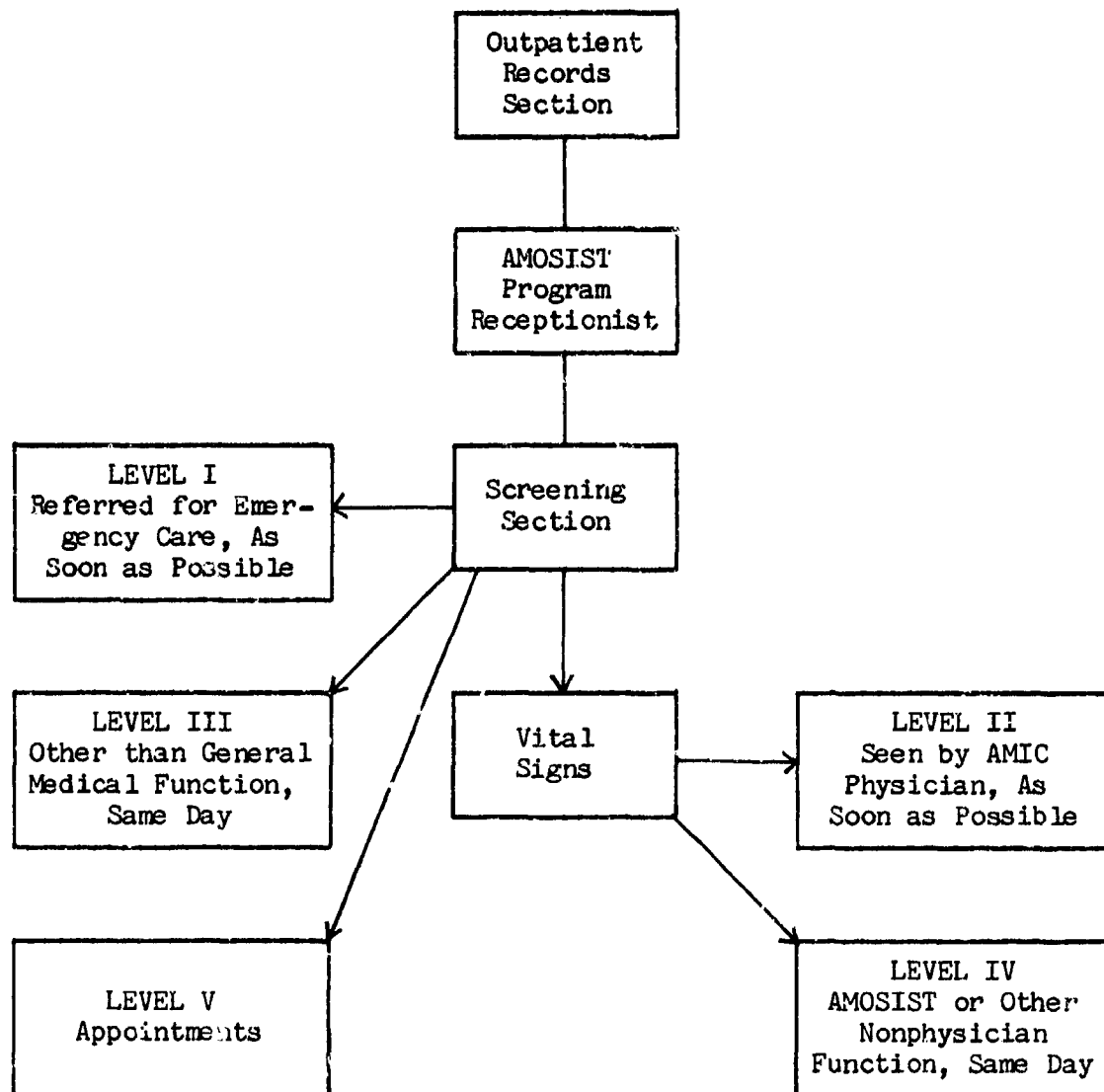
IV--AMOSIST or other nonphysician function, same day.

V--Appointments.

APPENDIX E

PROPOSED PROTOCOL FOR AMOSIST PROGRAM,  
ALTERNATIVE III

1. All adult unappointed outpatients, except emergency cases, are brought directly to the emergency room; medical records are picked up at the outpatient records section.
2. The patients are instructed to proceed to the AMIC.
3. The AMIC receptionist:
  - a. Checks each patient's I.D. card to determine the patient's eligibility for care.
  - b. Places the triage data collection sheet in the patient's medical record.
  - c. Time stamps the data collection sheet.
  - d. Gives each patient a queueing number.
4. The screener calls the next queueing number. The time the screener starts triaging the patient is recorded above the word "triage" on the triage data collection sheet. (See sample health record below.) Patients are interviewed by screeners in



Proposed Patient Flow for Womack Army Hospital  
AMOSIST Program, Alternative III

HEALTH RECORD		CHRONOLOGICAL RECORD OF MEDICAL CARE	
DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION ( <i>Sign each entry</i> )		
	<div style="text-align: center;">0730</div> TRIAGE (SCREENING) CLINIC, WOMACK ARMY HOSPITAL, FT. BRAGG, N.C.		
TIME IN 0715	LMP _____	AGE _____	
Receptionist Time	BCP _____	SEX _____	
	ALLERGIES _____	RACE _____	
	MD PRESCRIBED MED _____		
	CHIEF COMPLAINT(S)/DURATION	TRIAGE COMPLAINT(S) ( <i>Triage Manual</i> )	
	1. _____	1. _____	
	2. _____	2. _____	
	3. _____	3. _____	
	OTHER SUBJECTIVE DATA		
	LOGIC OVERRULE _____	MULTIPLE COMPLAINTS _____	
	LEVEL _____ REFERRED TO _____		
	CONSULTATIONS (Lab requests, X-ray, etc.)	VITAL SIGNS	
		TEMP _____	
		PULSE _____	
		RESP _____	
		BP _____	
		WT _____	
TIME OUT _____	SEEN BY _____		
PATIENT'S IDENTIFICATION ( <i>Use this Space for Mechanical Imprint</i> )		PATIENT'S NAME ( <i>Last, First, Middle initial</i> )	
		YEAR OF BIRTH	RELATIONSHIP TO SPONSOR
		COMPONENT/STATUS	
		DEPART/SERVICE	
		SPONSOR'S NAME	
		RANK/GRADE	
SSAN OR IDENTIFICATION NO.		ORGANIZATION	

CHRONOLOGICAL RECORD OF MEDICAL CARE



accordance with the Triage Manual and directed to the clinic and the health care provider who can best handle their problem.

Levels of disposition as providers in the Triage Manual are:

- a. Level I--Emergency room, as soon as possible.
  - b. Level II--Physician triage, as soon as possible.
  - c. Level III--General medicine or other physician function, same day.
  - d. Level IV--AMOSIST or other nonphysician function, same day.
  - e. Level V--Appointments.
5. Those patients sent for laboratory or X-ray work are told to return directly to the screener from laboratory or X-ray.
  6. Those patients referred to the emergency room or a specialty clinic leave the AMOSIST program.
  7. Those patients referred to an AMOSIST or an AMOSIST physician report to the vital signs room, where the following procedures are accomplished:
    - a. The patient is logged in at the vital signs room. (See sample patient log below.)
    - b. The vital signs are taken and recorded.
    - c. The patient's record is placed in the waiting file in chronological order, unless the patient's condition warrants priority treatment or the patient is active duty in uniform.
    - d. When the AMOSIST comes to the vital signs room and states that he/she is ready for the next patient, the AMOSIST is given the top record in the waiting file. The time the AMOSIST receives the record is recorded under the AMOSIST's

## AMIC PATIENT LOG

Receptionist Time	Patient Name	SSAN	AMOSIST Treating Patient on a Given Day	
			Jones	Johnson
0715 <sup>a</sup> 0715	Brown, Mary Smith, Joe	429-12-8765 443-18-1673	0730 <sup>b</sup>	0730

<sup>a</sup>The time the receptionist stamps on the SF 600.

<sup>b</sup>The time the AMOSIST picks up the chart to call the patient for treatment. (Note: The difference between this time and the receptionist time should not be greater than one hour. If it is, the corpsman working in the vital signs room should notify the clinic NCOIC of this fact.)

name in the log maintained in the vital signs room. The difference between the time the AMOSIST picks up the record and the time the receptionist time stamped the record should be less than one hour. If the time is greater than one hour, the corpsman working in the vital signs room should notify the clinic NCOIC.

8. Those patients triaged to the AMIC are interviewed, examined, and treated by an AMOSIST according to the flow sheets in the AMOSIST Manual. AMOSISTS are required to identify themselves as AMOSISTS to the patient prior to interviewing or treating the patient. The AMOSIST is under the supervision of the AMOSIST physician, who is readily available at all times. The AMOSIST Manual flow sheets specify when the AMOSIST physician must be consulted or when a patient must be transferred to the care of a physician. Periodic chart audit by the AMOSIST physician will help insure AMOSIST compliance with the algorithms of the AMOSIST Manual. When an AMOSIST's skill level is sufficient, he is "certified" by the AMOSIST physician. Thereafter, AMOSISTS use the AMOSIST Manual as a reference tool and are not expected to refer to the manual's algorithms during every patient encounter. If a patient experiences dissatisfaction with his care, the AMOSIST physician is always to be consulted. Also, for all "spontaneous returns" (patient returns without being told to do so, with symptoms of recent visit unchanged or the same) and for all requested follow-up visits where the patient is not improving satisfactorily, the AMOSIST physician must be consulted.

Consultations with the AMOSIST physician may involve any one or combination of the following: chart review, AMOSIST physician discussion, physician patient history, physician patient exam, physician outline of course of action within or beyond normal AMOSIST scope of duties, and/or physician assumption of total patient care.

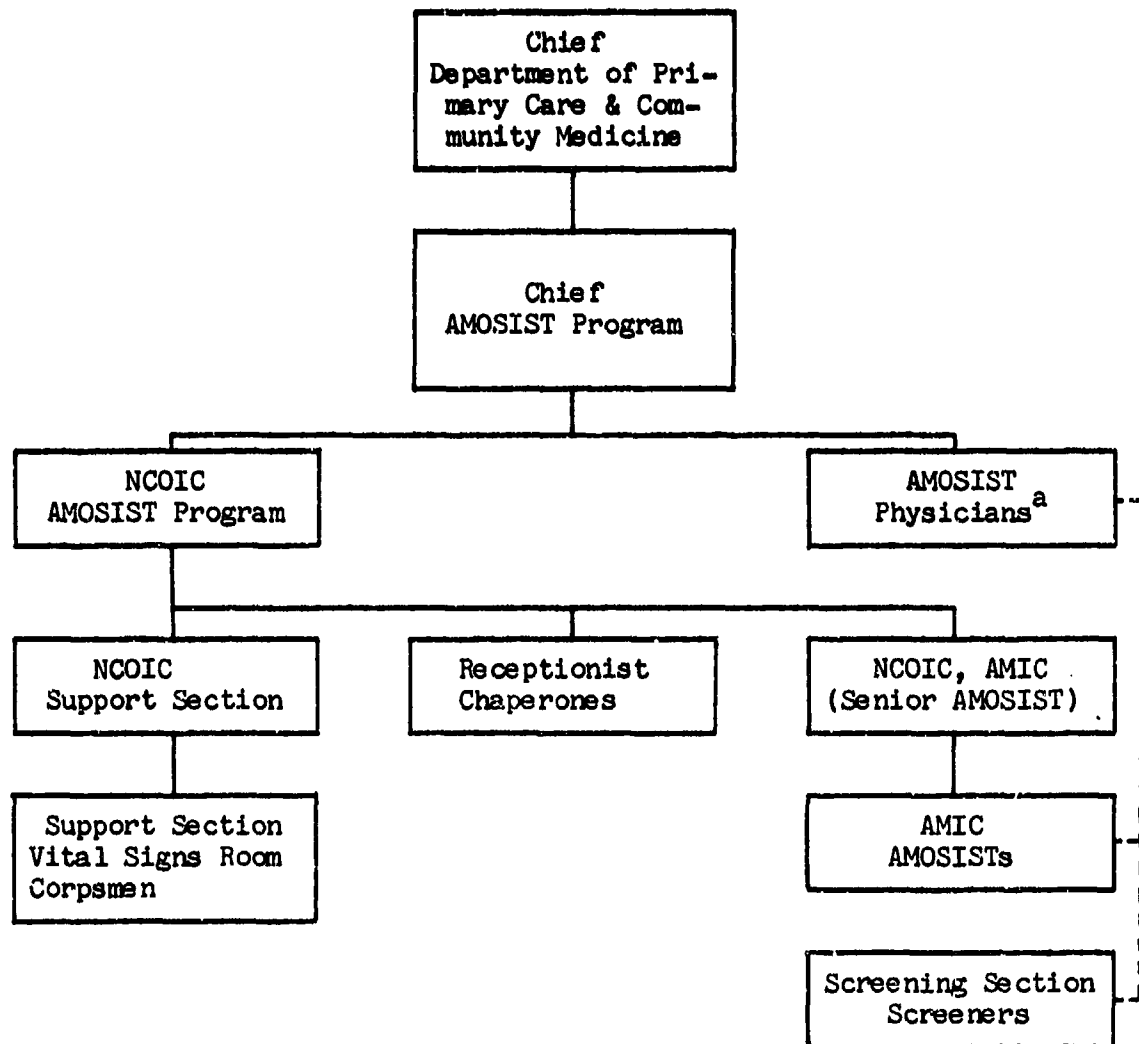
9. Those patients sent for laboratory or X-ray work are told to return directly to the AMOSIST from laboratory or X-ray.
10. After treatment of the patient, the health record is given to the patient to take to the pharmacy if a medication order has been written on the data collection sheet (DCS). If a medication order is not written on the DCS, then the record is turned in by the AMOSIST to the clinic NCOIC.

#### C. ORGANIZATIONAL ELEMENTS OF THE AMOSIST PROGRAM

1. The AMOSIST program (screening process and Acute Minor Illness Clinic) is a separate organizational element within the Department of Primary Care and Community Medicine with the chief, AMOSIST program, directly responsible to the chief, Department of Primary Care and Community Medicine. The AMOSIST program is organized into three subelements:
  - a. Screening Section.
  - b. Acute Minor Illness Clinic.
  - c. Support Section.

See proposed organizational chart below.

2. The following is a brief description of the duties and the organizational relationships of personnel concerned with the AMOSIST program<sup>1</sup>:



<sup>a</sup>These physicians provide technical supervision and consultative service for both the screening section and the AMIC.

Proposed Organizational Chart for Womack Army Hospital  
AMOSIST Program, Alternative III

- a. The chief, AMOSIST Program, is responsible to the chief, Department of Primary Care and Community Medicine, for operation and management of the AMOSIST program. His/her principal assistants are the AMOSIST physicians and the NCOIC, AMOSIST Program. In addition to his/her administrative duties, the chief, AMOSIST Program, participates in the patient care activities as an AMOSIST physician.
- (1) Operates and manages the entire AMOSIST program.
  - (2) Coordinates the AMOSIST program activities with the chiefs of other departments.
  - (3) Establishes policies and procedures for the AMOSIST program.
  - (4) Conducts periodic evaluation of the AMOSIST program.
  - (5) Submits records and reports as required.
  - (6) Supervises the AMOSIST physicians.
  - (7) Supervises the NCOIC of the AMOSIST program.
  - (8) Participates in selection of AMOSIST program personnel.
  - (9) Participates in the AMOSIST program continuing education activities.
  - (10) Participates in auditing of screening notes and data collection sheets.
  - (11) Participates in evaluation of screeners and AMOSISTs for technical competence.
  - (12) Functions as an AMOSIST physician as needed.
  - (13) Reviews the AMOSIST Manual and the Triage Manual periodically and revises them as needed.

## b. AMOSIST Physician

- (1) Supervises AMOSISTS and screeners.
- (2) Provides consultation for AMOSISTS and screeners.
- (3) Diagnoses and treats patients referred to him either directly from screening or from an AMOSIST.
- (4) Participates in the AMOSIST program continuing education activities.
- (5) Participates in the auditing of screening notes and data collection sheets.
- (6) Participates in evaluation of screeners and AMOSISTS for technical competence.
- (7) Assists the chief, AMOSIST Program, as required.

## c. NCOIC, AMOSIST Program

- (1) Assists the chief, AMOSIST Program, in the overall operation and management of the program.
- (2) Supervises the section NCOICs in nonmedical aspects of their duties.
- (3) Inspects the clinic area for cleanliness and neatness.
- (4) Inspects nonprofessional personnel for cleanliness, personal appearance, and bearing.
- (5) Prepares time schedules for nonprofessional personnel.
- (6) Coordinates the time schedule with unit duty rosters and unit training schedules.
- (7) Counsels or assists nonprofessional personnel with job-related problems.
- (8) Assists the chief, AMOSIST program, with administrative

and personnel actions for AMOSIST program personnel.

- (9) Approves all nonprofessional personnel leave and absences.
- (10) Supervises the screeners in nonmedical aspects of their duties.
- (11) Maintains a dignified, professional atmosphere in the screening area.
- (12) Inspects the screening area for cleanliness and neatness.
- (13) Inspects screeners for cleanliness, personal appearance, and bearing.
- (14) Submits requests for supplies to the NCOIC, Support Section.
- (15) Insures that screening stations are adequately restocked with supplies on a daily basis.
- (16) Performs duties of a screener as needed.
- (17) Handles patient complaints within clinic.
- (18) Insures smooth patient flow through the entire clinic.
- (19) Tours the clinic approximately every thirty minutes.
- (20) Supervises receptionist and chaperones.

d. Screener

- (1) Screens patients in accordance with the Triage Manual and refers them to appropriate treatment area.
- (2) Completes triage notes on all patients and enters them into medical records.
- (3) Prepares laboratory or X-ray requests for patients as



directed by the Triage Manual or the AMOSIST physician.

- (4) Orders vital signs as directed by the Triage Manual or the AMOSIST physician.
- (5) Consults with the AMOSIST physician when doubt exists as to proper disposition of the patient.
- (6) Observes patients for signs of an emergency condition as outlined in the Triage Manual.
- (7) Treats all patients and co-workers with courtesy and concern.
- (8) Maintains a neat personal appearance and a professional attitude at all times.
- (9) Maintains the screening station in a neat and orderly condition.
- (10) Requests required supplies through the NCOIC, Support Section.
- (11) Safeguards assigned copy of the Triage Manual.
- (12) Performs other duties as assigned.

e. NCOIC, AMIC (Senior AMOSIST)

- (1) Supervises the AMOSISTs in nonmedical aspects of their duties.
- (2) Maintains a dignified, professional atmosphere in the AMIC.
- (3) Inspects AMIC for cleanliness and neatness.
- (4) Inspects AMOSISTs for cleanliness, personal appearance, and bearing.
- (5) Submits requests for supplies to the NCOIC, Support Section.

- (6) Insures that treatment rooms are adequately restocked with supplies on a daily basis.
- (7) Performs duties of an AMOSIST or a screener as needed.
- (8) Audits patient records.
- (9) Completes patient workload report (calls in to Department of Primary Care and Community Medicine every morning).
- (10) Insures patient call backs are done on a timely basis.

f. AMOSIST

- (1) Reviews triage note to insure patient was appropriately referred to AMIC and redirects patient to other treatment areas if indicated.
- (2) Insures patients are aware of the nonphysician status of an AMOSIST.
- (3) Takes patients' histories, performs selected parts of the physical examination, makes presumptive diagnosis, and orders treatment in accordance with the AMOSIST Manual.
- (4) Records findings, presumptive diagnoses, and treatments on data collection sheets.
- (5) Orders authorized drugs on the AMOSIST drug list by underlining the appropriate medication on the data collection sheet.
- (6) Consults with the AMOSIST physician or refers the patient to the AMOSIST physician as directed by the AMOSIST Manual or when doubt exists as to findings,

diagnosis, or treatment.

- (7) Prepares laboratory, X-ray, or consultation requests as directed by the AMOSIST Manual or the AMOSIST physician.
- (8) Treats all patients and co-workers with courtesy and concern.
- (9) Maintains office in a neat and orderly manner.
- (10) Requests required supplies through the Senior AMOSIST.
- (11) Maintains a neat personal appearance and a professional attitude at all times.
- (12) Safeguards assigned copy of the AMOSIST Manual.
- (13) Performs screener duties as assigned.
- (14) Performs other duties as assigned.

g. NCOIC, Support Section

- (1) Supervises personnel assigned to the support section.
- (2) Receives and processes requests for supplies for the screening section and the AMIC.
- (3) Distributes supplies to screening stations and AMIC as needed.
- (4) Coordinates with the program NCOIC and the Senior AMOSIST regarding support activities.
- (5) Inspects support personnel for cleanliness, personal appearance, and bearing.
- (6) Insures a dignified professional atmosphere in the support area.

#### h. Support Personnel

- (1) Take and record vital signs as indicated on triage notes.
- (2) Chaperone patients as required.
- (3) Assist NCOIC, Support Section, in the distribution of supplies.
- (4) Maintain log of patients on appropriate forms.
- (5) Answer telephone and take messages or refer calls as indicated.
- (6) Maintain the support area in a neat and orderly manner.
- (7) Maintain a neat and professional appearance at all times.

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<sup>1</sup>The majority of the information contained in paragraph 2 was extracted from: U.S., Department of the Army, Health Services Command, Ambulatory Patient Care Model No. 13 (Ft. Sam Houston, Tex.: Health Services Command, August, 1976).

APPENDIX F

PATIENT MEDICAL ADVISOR

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## SELECTED BIBLIOGRAPHY

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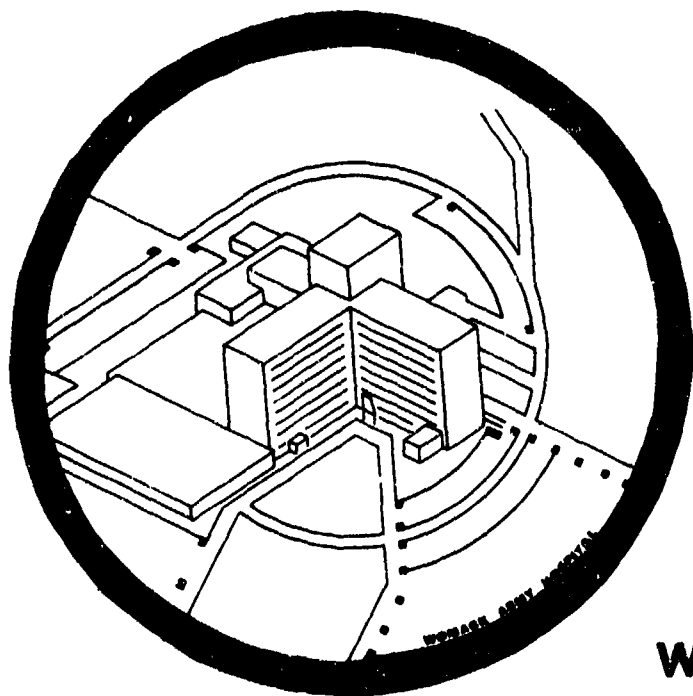
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# PATIENT MEDICAL ADVISOR

***SUGGESTED METHODS OF  
HANDLING MINOR ILLNESSES  
→ AT HOME***



**WOMACK ARMY HOSPITAL  
FORT BRAGG, NC**

Military hospitals throughout the country are faced with decreasing numbers of physicians. Womack Army Hospital is no exception. We are utilizing AMOSISTS, Nurse Clinicians, and Physicians' Assistants to extend our treatment capabilities. Managing minor illnesses at home is one way that we as a military community can act to conserve scarce medical resources. With this aim in mind, this booklet has been designed to give you some guidelines in self care so that you may treat yourself and your family at home for minor medical problems which do not require the attention of a physician or other provider of health care.

The self treatment topics are discussed separately and are indexed in order to provide you with easily followed guidelines, while at the same time alerting you of the specific instances when you are encouraged to seek medical care. There is also a drug index which lists drugs that are available from the Pharmacy without a prescription. This index identifies the drug, its use, gives directions for dosage and lists cautionary notes.

Womack Army Hospital is dedicated to providing you with the highest level of patient care and we hope that you will aid us in our efforts by frequent usage of this booklet.

Commanding Officer

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### ANIMAL BITES AND SCRATCHES

Seek medical care. Get as much information on the animal and the circumstances of the bite as you can obtain.

### ATHLETE'S FOOT

This is a fungus infection of the skin of the feet. It is usually found between the toes but sometimes it may affect the soles of the feet.

#### TREATMENT:

1. Dry your feet with extra care after bathing with particular attention given to drying between the toes. You should continue to do so even after the infection has cleared.
2. During the acute phase, go barefoot or wear sandals.
3. When the infection has improved, wear light footwear that allows free circulation of air.
4. Change your socks frequently. Wear cotton or other absorbent socks.
5. Apply plain talcum powder or athlete foot preparation (see Drug Index).
6. Use shower sandals in public showers; do not go barefoot in these areas.

Seek medical care for evaluation if you are not better in six days.

### BLISTERS

Blisters are small pockets of blood or serum resulting from either pressure, rubbing or minor burns.

#### TREATMENT:

1. It's best to leave the blister alone. Do not break it. The skin is "nature's bandaid over the tissue.
2. If the skin blister breaks, there is an open wound and it should be treated as such:
  - a. Keep it clean.
  - b. Soak in warm water for 15 minutes, 3 times a day, then cleanse the area with soap and water.

## **BLISTERS, continued**

- c. Keep a sterile dressing or bandaid over the exposed skin.
- d. Keep pressure off the site.

Seek medical care if it becomes infected or you are a diabetic.

## **BRUISES**

For the first 24 hours apply iced or cold cloths frequently to keep down the swelling. After 24 hours warm compresses will hasten the disappearance of the swelling and discoloration.

## **COMMON COLD (HEAD COLD)**

The common cold is a virus infection usually involving the nose, throat and sinuses. People may get a runny or stopped up nose, sore throat, hoarseness, a dry cough, weakness, an overall sick feeling, and aches and pains. The common cold usually lasts for about one week. Antibiotics (Penicillin, Tetracycline, Sulfa, etc.) are not of any value and may make things worse.

### **TREATMENT:**

Common cold preparations for adults and children over three years of age are available in the Pharmacy without a prescription. In addition, you may:

- 1. Avoid excessive cold temperatures and excessive fatigue.
- 2. Increase your liquid intake, drink eight ounces (one glass) of water every hour.
- 3. Stop smoking.
- 4. Suck lifesavers, hard candy, lozenges for sore throat. Hot, salt water gargles will help relieve a sore throat.

### **WHEN TO SEEK MEDICAL CARE:**

- 1. Temperature over 101 degrees.
- 2. White or yellow spots on tonsils or throat.
- 3. Shaking chills.
- 4. Chest pain.

Common Cold, continued

5. Shortness of breath.
6. Earache.
7. Skin rash.
8. Pain in teeth or sinuses.
9. Cough produces yellow green or gray phlegm (sputum).
10. Neck stiffness.
11. Not better in four days.

CONSTIPATION

To most people, constipation means stools (bowel movements) that are so hard or large that they are difficult to pass, or infrequent passage of normal bowel movements (more than three days between movements). Causes of constipation may be improper diet, poor bowel habits, emotional problems and others.

TREATMENT:

1. Avoid starches: bread, potatoes, pastries, macaroni products, baked goods.
2. Avoid dairy products: milk, cream, cheese.
3. Eat natural laxatives: fruits, vegetables, prunes and prune juice, fruit juices, bran flakes, bran muffins. However, do not eat apples, bananas or pears.
4. If you go for four or more days without a bowel movement use an enema, retaining it for 15 minutes. (Do not give enema to children under 6 years old).
5. Use Milk of Magnesia and gradually decrease the dosage as bowel movements become more normal. (Not for children under 6 years old.)
6. Increase water intake, drink more water (2 quarts per day).

WHEN TO SEEK MEDICAL CARE:

1. If there is belly pain associated with constipation.
2. If symptoms persist after having tried all the above.
3. If the patient is an infant.

### CUTS (LACERATIONS)

Minor scratches, scrapes, and cuts are a common occurrence, many of which can be cared for easily at home.

#### TREATMENT:

1. Cleanse the area thoroughly with soap and water.
2. You may cover the area with a sterile dressing (bandaid).
3. Continue to cleanse the area frequently until healed.

#### WHEN TO SEEK MEDICAL CARE:

1. If the cut is through the full thickness of the skin and there is a question of whether stitches are necessary.
2. If the cut bleeds excessively.
3. If there is a question of tendon or nerve injury.
4. If the wound is excessively dirty.
5. If the wound becomes infected.
6. If there is question of any of the above.
7. For a clean wound, if more than 5 years have passed since a Tetanus immunization. For a dirty wound, if more than 1 year has passed since a Tetanus immunization.



### DIAPER RASH

Diaper rashes are very common in young diaper wearing children. Most all are caused by:

1. The heat and humidity that occur as a result of plastic pants or plastic covered diapers, and,
2. The irritation caused by urine and the infant's bowel movements or soiling.

#### TREATMENT:

1. Remove, as much as possible, the above causes, that is:
  - a. Change to cloth diapers temporarily and do not use plastic pants; if convenient, allow the child to go without diapers altogether a few times a day while he is inside the house, or even better, outside in the sun.
  - b. More frequent changing of diapers and washing off the child's diaper area with water with each change.
2. Use Desitin, A & D Ointment or Clocream over the rash at night and a few times during the day. A baby powder will also help keep baby's bottom dry.
3. If urine smells strong and you are using cloth diapers, adding a cup of vinegar to the rinse cycle of the washing machine, and a cup to the diaper pail will get rid of excess ammonia.

#### WHEN TO SEEK MEDICAL CARE:

If these measures fail after a few days.

### DIARRHEA

Diarrhea is the passage of many loose, watery, or uniformed stools (bowel movements). It is usually caused by viruses, emotional problems, or improper eating habits.

#### TREATMENT:

1. Infants (newborn to 3 months): Seek medical care.
2. Infants (3 months to 2 years): Seek medical care if more than minimal diarrhea. Stop all juices and fruits and formula. Offer only sugar water: (one tablespoon sugar added to eight ounce bottle of water). Give small amounts frequently. Weigh patient (if a baby) at onset of the diarrhea. Continue clear liquid for 24 hours.

## DIARRHEA, continued

### 3. Children and Adults:

- a. Rest in bed.
- b. Nothing by mouth for 4 hours.
- c. After 4 hours start clear liquids by mouth in frequent, but small amounts: liquid jello, water, soda pop diluted with water and with bubbles stirred out.
- d. After 12-24 hours of liquid diet progress to diluted non-fat dry milk, crackers, bananas, bland foods.
- e. Do not eat or drink natural laxatives: prunes, beer, coffee, fruit, etc.

### SEEK MEDICAL CARE IF:

1. Blood, mucus, or worms in the stools.
2. Fever over 101 degrees.
3. Abdominal or rectal pain.
4. Severe abdominal cramps.
5. If no better in two days.

## EYE PROBLEMS

### PINK EYE (CONJUNCTIVITIS)

Usually caused by viruses, allergy, or irritants such as dust, cigarette smoke, etc. Cosmetics are a frequent cause of eye irritation.

### TREATMENT:

1. Avoid rubbing eyes.
2. A name brand of plain eye drops such as Visine is usually soothing.
3. Discontinue eye cosmetics.

### SEEK MEDICAL CARE IF:

1. Pus is forming in the eye or if eye is stuck shut in the morning.
2. There is swelling around the eye.

EYE PROBLEMS, continued

3. There is pain (more than simple itching).
4. A foreign body is suspected.
5. Pupils are uneven in size.
6. There is blurred or decreased vision.
7. There is pain or exposure to light.

CHEMICALS IN THE EYE

TREATMENT:

1. Hold the eye open and rinse with copious amounts of cool tap water for five minutes.
2. Call the Emergency Room (60301) for further advice.

EYE PAIN

1. Pain from wearing contact lenses usually subsides in a few hours. Persistent pain after wearing contact lenses should be evaluated by a physician.
2. A painful red eye should be evaluated by a physician.

## FEVER

Fever is an oral temperature over 99 degrees or a rectal temperature over 100 degrees. Fever is not a disease, it is a symptom. Fever often accompanies a minor illness covered elsewhere in this booklet. It is not usually necessary to seek medical care because of fever alone.

### TREATMENT:

#### Adults:

1. If your fever is higher than 101 degrees orally, stay in bed or at least greatly reduce your activity.
2. Drink one glass of water every hour.
3. Take aspirin as directed (see Drug Index). (If on anticoagulants, take tylenol instead of aspirin.)

#### Children:

1. Keep the temperature down.

a. Baby aspirin - 1 baby aspirin for every year of the child's age (up to 5 years of age) and the dose may be repeated every 4 hours in order to keep the temperature down.

- b. Tylenol drops - (do not use over 7-10 days)

- Child 0-3 months - none
- Child 3-9 months - 0.3cc
- Child 9-12 months - 0.6cc
- Child over 12 months - 0.6cc per year of age

- c. Tylenol Elixir (liquid)

- Child 2 years of age - 1 teaspoon
- Child over 2 years of age - 1/2 teaspoon per year over 2 years
- Children over 4 years of age may use one adult aspirin every 4 hours
- Age 9 and above can use two aspirins every 3-4 hours.

d. Do not keep children in sleepers or under heavy blankets, for that will keep the heat contained and the temperature will not go down as quickly.

### Fever, continued

e. Small children with temperatures over 104-105 rectally should have cool to lukewarm sponging in the bath tub for a minimum of 45 minutes. Rub vigorously with a wash cloth (do not use alcohol sponge baths). If fever over 103 rectally persists, seek medical care.

f. Give cool liquids in frequent small amounts (sips or teaspoon), pop-sicles, ice cubes to suck on. These will help to hydrate and also cool the child.

### WHEN TO SEEK MEDICAL CARE:

If fever persists after trying the above steps, or if you are in pain, or if your temperature is higher than 102 degrees orally, or if it is associated with inflammation or worrisome symptoms, or if it recurs 24 hours later.

### HEADACHE

A headache can result from stimulation of or pressure on any of the pain sensitive structures in the head. Common causes are fatigue, tension, emotional upset, and head colds.

### TREATMENT:

1. Take aspirin (see Drug Index), or the recommended dose of whatever commercially available pain reliever you prefer, such as Bufferin, Anacin, etc. (If on anticoagulants, do not take aspirin.)
2. If you are allergic to aspirin or if on anticoagulants, take tylenol.
3. Put ice packs to area of headache.

### WHEN TO SEEK MEDICAL CARE:

1. Headache persists in spite of the above treatment.
2. Stiff neck.
3. Visual disturbances.
4. Weakness in arm or legs.
5. Nosebleed, especially if you have high blood pressure.
6. Fever over 101 degrees.
7. Nausea, vomiting.

### HEMORRHOIDS (FILES)

Hemorrhoids are dilated veins located in and around the rectum and anus. They may become slightly inflamed, producing a small amount of discomfort or they may produce a small amount of bleeding. If the bleeding stops spontaneously, or if it is small, there is no need to be seen immediately; however, if bleeding persists, the problem should be evaluated further.

#### TREATMENT:

1. Rest until bleeding, discomfort or inflammation stops.
2. Include bulk foods in diet such as salads, bran cereal, coarse breads, etc.
3. Drink plenty of fluids.
4. If constipation is a problem, eat foods which have a mild laxative effect on you such as prunes or other fruits. You may also use a mild laxative such as 1 or 2 tablespoons of mineral oil.
5. Sit in warm water for 10 to 15 minutes 4 times a day.
6. You may take aspirin or any such medication for pain or discomfort.

#### WHEN TO SEEK MEDICAL CARE:

Immediately, if bleeding is excessive or if pain is severe. If not, make arrangements to be seen within the next several days.

### INSECT BITES AND STINGS

Most of these problems are minor and do not require a doctor's attention.

#### TREATMENT:

If only a minor discomfort exists, apply ice packs to the bite or sting. Remove stinger if possible. Take aspirin and apply calamine lotion (see Drug Index list).

#### WHEN TO SEEK MEDICAL CARE:

1. If the person faints or has trouble breathing, take them to the Emergency Room immediately.
2. If the bite becomes infected or is large and inflamed.
3. If swelling around lips, mouth or eyes occurs.
4. If hives occur.

### TICK REMOVAL

Ticks may carry tick-typhus fever if infected and attached for a few hours. In the removal of an attached tick, care must be taken not to crush it or to leave its mouthparts embedded in the skin. A tick can be removed most effectively by using small forceps to grasp it as close to its mouthparts as possible and then carefully pulling it off. A tick should not be grasped by its abdomen since this may cause disease organisms to be injected into the person. Crushing a tick with one's fingers may also be a dangerous practice since the crushed tissues and feces may transmit disease organisms through broken places on the skin. If forceps are not available, a tick should be removed gently with a piece of paper held between the fingers. After a tick is removed, it should be killed with alcohol or heat; then the bite should be treated with a suitable antiseptic. If symptoms and signs below develop within a period of 3-10 days, personnel should be immediately brought to Womack Army Hospital. Be sure to tell examining medical personnel about the tick exposure.

### SYMPTOMS AND SIGNS:

Sudden onset of high fever, headache, chills, inflamed eyes (conjunctivitis) and/or a measles-like rash appearing first on the arms and legs before appearing on the palms and soles before spreading over most of the body.

### MENSTRUAL CRAMPS

This is frequently present without any organic cause being found for it. Most girls will have a great deal less difficulty with menstrual cramps after having had their first baby.

### TREATMENT:

1. Bed rest.
2. Put a hot water bottle on the part of the abdomen that is most painful.
3. Eat lightly until the symptoms are better. Avoid salty foods.
4. You can take aspirin, APC, or the like for the pain.
5. You can take commercial preparations such as Midol or Pamprin.

### WHEN TO SEEK MEDICAL CARE:

1. If the pain is severe.
2. If marked nausea is present.
3. If fever is present.
4. If foul, or abnormal vaginal discharge is present.

### MINOR BURNS (OTHER THAN SUNBURN)

A burn is a wound caused by excessive heat, electricity, or certain chemicals. The end result is the same: tissue damage. We are primarily concerned with first and second degree burns. A first degree burn is one with reddening and pain with no blister formation. A second degree burn is one in which blisters do form but underlying tissue damage does not occur. A first degree burn can almost always be treated at home. A second degree burn, assuming it does not cover a large or critical area (face, genital), can usually be treated at home. A third degree burn is characterized by deep tissue damage and lack of pain and should be treated by a doctor.

#### TREATMENT:

1. Wash area with comfortably cool water and a mild soap.
2. Do not open or peel blisters.
3. Apply a cold press or ice pack immediately to the burn. This may help prevent swelling.
4. Take aspirin (see Drug Index list) to reduce pain and inflammation.

#### WHEN TO SEEK MEDICAL CARE:

1. When there is damage to the following areas.
  - Face
  - Neck
  - Eyes
  - Respiratory system
  - Genital areas (groin area)
  - Hands
2. Blistered areas become infected.
3. Foreign particles are imbedded in the burn.
4. If the burn area is extensive.



### NAUSEA (VOMITING)

The most usual causes are food poisoning, emotional upsets, fever, viral infections, overindulgence in food or alcohol.

#### TREATMENT:

1. Bed rest.
2. Nothing by mouth for 2-4 hours.
3. Take ice chips every 15 minutes.
4. After vomiting lessens, start on clear fluids as listed under treatment of diarrhea.

#### WHEN TO SEEK MEDICAL CARE:

1. Temperature over 101 degrees.
2. No improvement in 24 hours.
3. Convulsion.
4. Shortness of breath or choking.
5. Belly pain.
6. Children under six months of age.

### NOSERLEEDS

Nosebleeds are caused by many things: injuries, accidents, etc. However, the most common causes are:

1. Irritation from fingers, Q tips, sneezing.
2. Lack of humidity in the air we breath.

Inside our nose, near the tip, there are tiny blood vessels which are easily broken. These are the source of most nosebleeds.

## Nosebleeds, continued

### TREATMENT:

1. Blow nose gently to remove clots.
2. Hold nose between thumb and forefinger with firm pressure for five full minutes, breathing through your mouth.
3. Sit up; don't lie down!
4. If the room air is dry (low humidity), from either air conditioning or the furnace being on, use a vaporizer or humidifier.

### WHEN TO SEEK MEDICAL CARE:

1. If bleeding persists after you have tried these measures.
2. If bleeding is excessive.

## POISONS

Many plants and household items are poisonous. Frequent poison items include aspirin, iron tablets, tranquilizers, and lighter fluid. Call a physician or Emergency Room immediately. Be prepared to give the name of the poison. If possible have the container at hand and bring it with you if you come to the hospital.

At some time it would be wise to ask your doctor to provide you with Syrup of Ipecac to induce vomiting in children who take poisons. Do not induce vomiting; however, unless a doctor tells you to.

### SUGGESTIONS:

1. Purchase only medications with safety tops.
2. Don't purchase lye products if you have small children in the household.
3. Select household cleaning products that do not have poison labels.
4. Always have the container with you when you seek medical care.

### POISON OAK

The rash of poison oak is caused by an irritating oil from the poison oak plant coming into contact with sensitive skin. The best treatment is avoidance of contact with the plant. Avoid contact with pets that have been in poison oak areas. The poison oak plant has 3 leaves in a group. It is green in the summer and red in the winter. Avoid exposure to smoke from fires where poison oak may be burning.

#### TREATMENT:

1. If contact is known, cleanse the whole body including hair thoroughly with soap and water twice.
2. If blisters have formed, wash gently with soap and water. Do not break blisters. Place wet compresses over involved areas 4-5 times a day.
3. If blisters have broken and area is not weeping, you may use plain calamine lotion on the area.
4. Keep the affected area clean to avoid secondary infection.
5. Wash all clothes worn and clean shoes at the time of exposure to eliminate any poison oak oils still on them.

### SORE THROAT

Most sore throats are caused by viruses or irritation from shouting, coughing, or smoking. A few sore throats; however, are caused by bacteria, as a strep throat - this kind requires an antibiotic called penicillin to be properly treated.

#### TREATMENT:

1. Aspirin (see Drug Index list).
2. Salt water gargle every two hours (1/2 teaspoon salt to 8 ounces warm water).
3. Lozenges, lifesavers, hard candy.
4. Stop smoking.

#### WHEN TO SEEK MEDICAL CARE:

1. If the sore throat is severe.
2. If accompanied by tender "knots" in the neck.

### Sore Throat, continued

3. If accompanied by high fever.
4. If the sore throat persists for more than 24 hours.
5. If there are white spots on throat or tonsils.

### SUNBURN

Sunburn results from overexposure to the sun or sun lamps. It can occur even on cloudy days because the sun rays can filter through the clouds. The best prevention for sunburn is careful, gradual exposure to the sun, avoiding the hot afternoon hours. Many lotions are available as protective sunscreens. Some of the best contain Para-Amino Benzoic Acid (PABA). Baby lotion is not a good sunscreen. A cap with a bill will protect an infant's eyes and face.

### TREATMENT:

1. The best treatment is prevention!
2. Drink plenty of liquids.
3. Take cool showers or baths or use cool compresses.
4. Take aspirin (see Drug Index list); aspirin will help relieve the pain and will reduce the inflammation.
5. You may apply medicine to relieve pain such as Solarcaine.
6. If blisters develop, follow the treatment for blisters in this booklet.

### WHEN TO SEEK MEDICAL CARE:

1. If vomiting or dizziness occur.
2. If the sunburn is severe.
3. If there is extensive blistering.

### TOOTHACHE

Toothache is a condition characterized by pain in and/or around a tooth. It can be caused by infection in the tooth or gum, food particles between the teeth and most commonly by tooth decay.

#### TREATMENT:

1. Take aspirin (see Drug Index list). Do NOT put aspirin directly on the painful tooth because aspirin will destroy the tooth's enamel.
2. Avoid extremely hot and extremely cold food and drinks.

#### WHEN TO SEEK MEDICAL CARE:

See the dentist as soon as possible.

### HANDOUT DRUG LIST

The following drug items are available without a prescription from the Pharmacy.

Acetaminophen - See Tylenol

Aspirin (Adult) - Also see Aspirin (Baby)

Indications: For relief from pain from simple headache, neuralgia and common cold.

Directions: Children, 5-12 yrs: 1/2 to 1 tablet every 3 to 4 hours as needed. Adults, 1 to 2 tablets every 3 to 4 hours as needed.

NOTE: If allergic to aspirin, or if taking anticoagulants, or drugs for gout, use Tylenol.

Aspirin (Baby) - See section on Fever

Indications: For relief of simple headache and pain and discomfort due to other minor causes such as head colds, muscular pains and teething.

Directions: Children, 3-5 years, follow package instructions. 5 years, see directions for Adult Aspirin.

Athlete Foot Preparations - Desenex Powder or Ointment  
(See directions on container.)

Calamine Lotion with Menthol and Phenol

Indications: As a protective agent to skin and for relief of itching.

Directions: Apply with fingers or cotton pad to the itching skin.  
Dab - do not rub.

Cold Tablets - Triaminicin

Indications: For relief of nasal and sinus congestions, aches, pains, fever, sneezing, watery and itching eyes associated with the common cold, sinus and hay fever.

Directions: Adults, 1 tablet every 4 hours not to exceed 4 tablets in 24 hours.

Caution: Individuals with high blood pressure, heart disease, diabetes or thyroid disease should use only as directed by a physician. This preparation may cause drowsiness. Do not drive or operate machinery while taking this medication.

Cough Syrup - Robitussin (Guifenesin) Expectorant

Indications: To help loosen phlegm in common colds.

Directions: 3-6 years, 3/4 teaspoonful every 3 to 4 hours. Adults, 1-2 teaspoonfuls every 3 to 4 hours as needed.

Handout Drug List, continued

Desenex Powder and Ointment - See Athlete Foot Preparations

Ipecac Syrup

Indications: For emergency use to cause vomiting in poisoning. Before using, call physician or hospital emergency room.

Directions: 1 tablespoonful (15ml) in persons over one year of age. Follow with large amounts of water.

Kaopectate

Indications: For treatment of uncomplicated diarrhea.

Directions: Over 12 years, 2 tablespoonfuls after each loose bowel movement.

Neo-Synephrine Solution, 1/4% Nose Drops

Indication: Temporary relief of nasal congestion.

Directions: Children (preferable to use Saline Nose Drops). Over 3 years, instill 2 or 3 drops in each nostril. May be repeated every 3 to 4 hours when necessary. Adults, instill 2 or 3 drops in each nostril. May be repeated every 3 to 4 hours if necessary.

Caution: Do not exceed recommended dosage or use for more than 2 days.

Saline Nose Drops

Indications: Nasal congestion in infants.

Directions: 2 to 3 drops in each nostril 3 to 4 times a day followed by suction with nasal aspirator.

Triaminicin - See Cold Tablets

Tylenol Tablets, Drops, Elixir

Indications: For relief of pain from simple headache, neuralgia and fever.

Directions: Children, 3-6 years, Drops, 1.2cc every 4 hours. 6-12 years, Elixir, 2 teaspoonfuls 3 or 4 times daily. Adults, 1-2 tablets 3 or 4 times daily.